



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Patent Application of

Steven R. Boal

Application No. **09/451,160**

Filed: November 30, 1999

Art Unit: **3622**

Examiner: James W. Myhre

Confirmation No. 8692

For: ELECTRONIC COUPON DISTRIBUTION SYSTEM

DECLARATION OF RONALD P. KANANEN UNDER 37 CFR 1.131

Commissioner for Patents  
Washington, D.C. 20231

**RECEIVED**

AUG 17 2004

Sir:

**GROUP 3600**

I, Ronald P. Kananen, Esq., Registration No. 24,104, a citizen of the United States of America, hereby declare that:

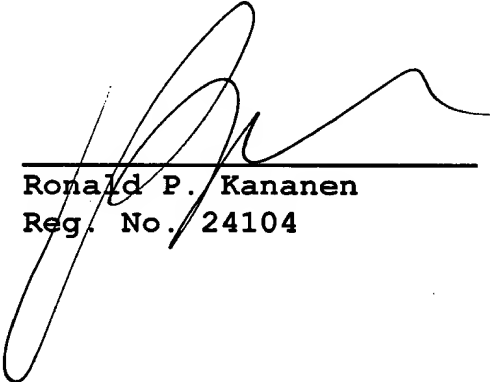
1. I am the named attorney for the above-identified application, and am familiar with its contents, the Declaration of Steven R. Boal, including the pending claims attached as Attachment A, and the attachments to that Declaration. I am also the person/attorney mentioned particularly in paragraph 5 of the Boal Declaration.

2. The statements in the Boal Declaration are accurate and true insofar as I am aware. I located my Day-Timer record for August, 1999 to verify the date of my notes. I personally prepared those notes of Attachment B on the date shown by

Attachment C. I received Attachment E on or about the date indicated. I am variously referred to in the Declaration as "Ronald P. Kananen" or "Ron Kananen".

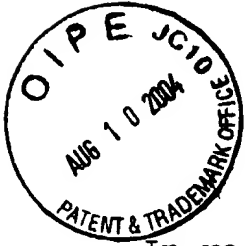
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereunder.

DATE: August 10, 2004



Ronald P. Kananen  
Reg. No. 24104

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For: ELECTRONIC COUPON DISTRIBUTION SYSTEM

DECLARATION OF STEVEN R. BOAL UNDER 37 CFR 1.131

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**RECEIVED**

AUG 17 2004

Sir:

**GROUP 3600**

Now comes Steven R. Boal, a citizen of the United States of America, who declares that:

1. I am the named applicant for the above-identified application, and am familiar with its contents, including the pending claims attached as Attachment A. I am also the President of the assignee of this application, Coupons, Inc., a California corporation (hereafter "Coupons").

2. I am aware that the claims are currently rejected in this application by reliance on, among other things: (1) the U.S. patent to Mankoff, U.S. Pat. No. 6,385,591, filed on May 11,

1999, and issued on May 7, 2002 (hereafter "Mankoff");  
(2) Schreiber, U.S. Pat. No. 6,298,446, filed on September 14, 1999, claiming continuation-in-part priority on its parent application filed on May 17, 1999 (its "CIP parent date"), and issued on October 2, 2001 (hereafter "Schreiber '591"); and (3) Philyaw, No. 6,377,986, issued on April 23, 2002, based on an application filed on February 1, 2000, claiming continuation priority on the basis of its "continuation parent" filed on August 19, 1999, and its "continuation-in-part parent" filed on September 11, 1998. I understand that none of these three patents is an "absolute bar" to my patent in that each was not issued more than one year prior to the filing of my application on November 30, 1999, that is, prior to November 30, 1998. I further understand that the examiner relied on portions of Philyaw having an effective date of August 19, 1999 and Schreiber having an effective date of September 14, 1999; at the very least my proofs show a completion of the invention by August 11, 1999 so that the portions relied upon by the examiner are antedated. I also state and aver that the invention was completed in December 1998 or January 1999, dates that precede any effective date of the references relied upon by the examiner in this application, according to the showing in this declaration.

3. I also understand that if I can show prior invention, i.e., prior to the applicable filing date, as relied upon, of each of those patents, under 37 C.F.R. 1.131, none of those patents may be cited effectively against the claims of my application. I further understand the requirements of 37 C.F.R. 1.131(b) as to the showing of facts which shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the references, and that original exhibits of drawings or records, or photocopies hereof, must accompany and form part of this declaration or their absence satisfactorily explained.

4. I intend to show prior invention by a reduction to practice of at least as much of the Mankoff, Schreiber, and Philyaw patents as was found by the Examiner to be applicable to my invention. For example, in the Office Action dated May 11, 2004 (the most recent of some nine Actions), the Examiner found certain claims to be anticipated by the Philyaw '986 patent, specifically referring on pages 3 and 4 to col. 19, lines 11 to 60 of the Philyaw '986 patent. More specifically, the Examiner referred to the wand 1600. Since the disclosure of the wand technology was not present in the parent applications for the Philyaw patent prior to its filing on February 1, 2000, the applicable date to defeat the Philyaw patent is February 1, 2000.

Moreover, because I can show completion of the invention at least prior to August 19, 1999, the "continuation-in-part" parent of the Philyaw '986 patent cannot be relied on to support any rejection based on Philyaw '986 or its September 11, 1998 parents. Still further, this can be seen by referring to the Philyaw patent No. 6,098,106 issued on August 1, 2000 based on an application filed on September 11, 1998.

5. Still further, Attachment B is a handwritten memorandum of Ron Kananen, showing the complete invention as of August 11, 1999 and is presented in documents made at a meeting between me and Ron Kananen, a patent attorney in Washington, D.C., whose Firm I had engaged to prepare this subject application. Based on the showing of a completion of the invention as of August 11 1999, I am also able to antedate the actual filing date of the Schreiber '446 patent. Attachment C is a true copy of portions of a Day-Timer record of Ron Kananen, verifying that the meeting date was August 11, 1999. The declaration of Ron Kananen verifies each of these dates and that meeting as having occurred on that date.

6. My activities on this invention also antedate the May 11, 1999 actual filing date of Mankoff. On or about June 6, 1998, after I had discussed my ideas for an electronic coupon system, Michael R. Walsh provided me with a memorandum

(Attachment D) that outlined matters to which Mr. Walsh would attend in implementing my ideas for this project. His memorandum refers to an Internet Coupon Service ("ICS") as a subscription service that allows customers to get special offers from ICS advertisers. The content of the proposed system envisioned a text message or GIF, an expiration date, category tags, and an optional URL for a customer who wanted more information about the coupon offer. Proposed software is discussed on page 2 of the Walsh memorandum. Technical specifications are entered on page 3 of the memorandum. The sketch accompanying the memorandum has a left hand portion that is not understood today, with three block diagrams showing the proposed system for a coupon for "clothing" and a potential provider of coupons as "The Gap" in the second block. The lower block represents a tool bar for a computer.

7. In about December, 1998, the ICS system was sufficiently complete to permit beta testing. In fact, the system was tested in December, 1998 at a date that was used for a possible public use date so that my application filed in November, 1999 would not be barred.

8. With the successful testing of the Coupons system in December, 1998, I then addressed a matter that had come to my attention through the press; that is, whether my system might violate any rights in a Coolsavings patent to Golden. On January

4, 1999, I contacted Ron Kananen to initiate an analysis, explaining (Attachment E) that the user is never required to provide any further profile information to begin receiving savings certificates (see the second full paragraph of Attachment E of January 4, 1999 to Ron Kananen).

9. As I mentioned above, the system was complete in that it was beta-tested in December, 1998 and thus was "ready to go", thus prompting the inquiry of January 4, 1999 to my attorney.

10. Our website, [www.coupons.com](http://www.coupons.com), in the developments for the year 1999, indicates that the predecessor in interest of the Company had a press release dated February 16, 1999 under the predecessor's name, Valuepass.com and stated that it had unveiled the first web-enabled persistent client system to deliver value saving coupons and sales incentives directly to consumers over the Internet. This website is reprinted at Attachment F. I personally recall that the website was complete as of February 16, 1999, and that it performed substantially like the system described in the patent application that was eventually filed on November 30, 1999.

11. The headquarters of the company were relocated in early 2002, and some records were thrown out, misplaced or relocated. In particular, I have been unable to locate developmental records of that first beta-testing in December, 1998. However, I did



locate a file labeled "February 1999". In that file, I located four (4) pages of schematic prints of a part of the system. I recognized that those drawings were part of a larger group of documents that had been prepared to describe the system for purposes of preparing a patent application. These drawings are identified as collective Attachments G-1 to G-4.

12. I return to the Notes of August 11, 1999. On or about August 11, 1999, I traveled from California to Washington, DC. and met with my patent attorney, Ronald P. Kananen, Esq. in Washington, D.C. and described our system to him based on the events that had occurred primarily at about February 16, 1999, and in the intervening months. He took notes during our meeting, held in the conference room of the Washington Office of Rader, Fishman & Grauer, a copy of twelve (12) pages of which are attached as collective Attachment B-1 to B-12. I have noted that an entry on the first page is inaccurate when it refers to "launched February 19, 1998" - rather that date should have been February 19, 1999 as shown in the website entry of Attachment . I also recall from that meeting using his "whiteboard" to make program sketches along the lines shown in his notes. At or near the end of that meeting, he asked for additional sketches and/or drawings of the system. He had introduced John Reese, an attorney in the Bloomfield Hills branch of that firm. I provided

those sketches, as shown in Attachment H, having eight pages and labeled H-1 to H-8.

15. From those materials, Mr. Reese prepared a draft of the application for my review in less than three months from the time I met with Ron Kananen. I believe that the date of the completion of that draft, with the drawings labeled as Attachment I was November 12, 1999.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereunder.

DATE:

8/5/04



Steven R. Boal, CEO  
Coupons, Inc.

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**APPENDIX**

**IN THE CLAIMS**

1. The method of claim 24 further including the steps of:  
collecting device information from a device of a client  
system without obtaining information sufficient to specifically  
identify the user;

associating a device ID with the device information at a  
main server system;

selecting said coupon according to the device ID to thereby  
identify the coupon appropriate for said user based on the device  
information; and,

transmitting the selected coupon from the main server system  
to the client system.

2. The method of claim 1 wherein said collecting step  
comprises the optional substep of:

obtaining from the remote user demographic characteristics  
including at least one of a postal zip code associated with the  
user and a state in which the user resides.

3. The method of claim 1 further including the step of:  
associating the device ID with a remote client system.

4. The method of claim 3 further including the step of:  
generating a printed version of one of the transmitted  
coupon at the remote client system.

5. The method of claim 3 further including the step of:  
transmitting a request from the client system to the server  
system to perform said selecting step wherein the request  
includes the device ID.

6. The method of claim 5 wherein said request transmitting  
step includes the substep of:  
automatically including the device ID in the request without  
any intervention by a remote user of the client system.

7. The method of claim 5 wherein said request transmitting  
step occurs automatically without any intervention by a remote  
user.

8. The method of claim 7 wherein said request transmitting  
step occurs at predetermined intervals.

9. The method of claim 3 wherein the remote client system operates in accordance with an operating system characterized by a graphical user interface (GUI), said method further including the steps of:

displaying an icon visible to the user in a first display state; and,

displaying the icon in a second display state different from the first display state when a new coupon is available for the user.

10. The method of claim 9 wherein the second display state is a flashing display state.

11. The method of claim 3 wherein said transmitting step includes the substeps of:

encrypting coupon data corresponding to the selected coupon at the server system in accordance with a server system encryption strategy; and,

sending the server-encrypted coupon data to the client system.

12. The method of claim 11 further including the step of:

receiving the server-encrypted coupon data at the client system;

encrypting the server-encrypted coupon data in accordance with a client system encryption strategy to thereby generate doubly-encrypted coupon data; and,

storing the doubly-encrypted coupon data on the client system.

13. The method of claim 12 further including the steps of: decrypting the doubly-encrypted coupon data at the client system; and,

generating a printed version of one of the selected coupon at the remote client system.

14. The method of claim 3 further comprising the steps of: transmitting advertising data to the client system; and, displaying at least a portion of the transmitted advertising data on a display portion of the remote client system.

15. The method of claim 14 wherein the advertising data comprises a plurality of advertising impressions, and, wherein said displaying step comprises the substep of:

selecting one of the plurality of advertising impressions as a function of a selected subcategory of coupons available on the remote client system.

16. The method of claim 3 further comprising the steps of: detecting events occurring at the remote client system; storing the detected events in a user history file; and, transmitting the user history file to the server system.

17. The method of claim 16 wherein said detecting step includes the substeps of:

determining when one of a plurality of advertising impressions has been displayed on a display portion of the remote client system; and,

determining a sponsor identification of the advertising impression.

18. The method of claim 16 wherein the storing step comprises the substep of:

encrypting the detected events to thereby generate encrypted user event information; and,

writing the encrypted user event information to the client system.

19. (canceled).

20. (canceled).

21. (canceled).

22. (amended) The method of claim 24 further including the steps of:

collecting device information from a device on a network;

associating a device ID with the device information;

selecting said coupon according to the device ID;

encrypting coupon data corresponding to the selected coupon;

and,

transmitting the encrypted coupon data from the main server system to the client system.

23. The method of claim 22 further including the step of:

decrypting the encrypted coupon data to recover the selected coupon.

24. A method of secure electronic coupon distribution comprising the steps of:



associating a Uniform Resource Locator (URL) including a promotional code with a coupon;

displaying the coupon to a user;

disabling access to the URL by the user; and,

invoking the URL with a browser to thereby enable the user to redeem the coupon.

25. The method of claim 24 wherein said invoking step includes the substep of selecting the coupon by one of clicking on the displayed coupon and clicking on an object different than the coupon displayed to the user.

Steven  
Baker

5-22-98 uncrp

privacy - site -

[2]

launched February 18, 1998.  
signed agreement

were up - writing Beta Version

1.0 February 18, 1999

Timeline

[ ] - dates -  
inquiry or parts

no remote user  
no demographic ] = CoolServer,

- Dotras (1.2.2.2)
- filter -
- 

can zip code

( ) issues -

User Downloads  
CD Rom  
Installes

VPSetup.Exe

Set Up Program

Set up  
on machine

Establish AN  
Internet connec.  
(ANX)

AOL Conn

(any  
internet  
connector)

Run Program  
VPSetup

non  
internet  
on  
internet

non-  
internet

VP Setup  
locally installs Directory

Personal At.

Subdirectory  
encrypted files, folders

until user  
modem  
yes/no  
zip code, Sta

100% unique to that  
user's machine

~~Encryption~~ Set up file  
on user's machine  
Encryption Key -

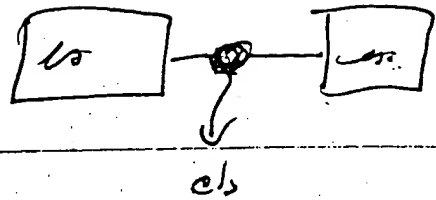
! user would need  
multiple machines  
o VPEx5.Com

(Why: cannot break code)

VALUE PASS. <sup>EX</sup> ~~COM~~

.COM4 PASSport

Check VALUE PRESS, COM



local registration key

original encrypted - once server regist.

- 100 files  
x

decrypts

Not encrypt using users p.c  
(encryption code  
already in  
machines)

\* Not just a courier delivery system  
recipients, stack queues, menus, agents (pages)  
non-intrusive  
- never user - never find - zip code  
- secure, w/o worry about

Learn for paternity -  
custom architecture for  
systems  
key to

## Data Flow

HTTP look up request to  
see if on network was  
tablets  
ICMP echo request

VALUEPSS. 07/10

## Server -

cluster of servers "Front Door" | ... n machines

1. Echo - ~~not online?~~ <sup>am I online?</sup>
  1. { stop
  2. { proxy server
  3. { send out proxy

tell user offline -

2. Any other time -  
okay, am in state today -  
who will serve me  
(just door)  
virtual address  
proprietary cluster

II 5 min form ADVERTS (intergradable)  
updates

• coupon <sup>10-</sup> ~~25K~~ - 1.8 million  
non

60 x 10K = 600,000/mo  
Merchant  
(A.P.)

III Update - 82% - Daily send  
checks & mail

Offline advertising  
batches for system

- responding to info requests

5 min. loop -

IV

VALUEPROBS WINDOW

W1 W2

W1 W2 W3

W1 W2

on Fall 66

co. brandy is  
affiliated

any 3d party

10000  
 ↓  
 10012  
 - coupon divider  
 install -

new logo  
 value in 10012

can change

V Promotions - 2500 off / year

offered Max 7-

induced?

offered Max, for example, can get

require state / zip - ~~California 95~~ →  
 called folder










— 0

Value Pass - to an,

(code)

2 Parameter Code - coupon

the amount n parameters = 1 parameter code  
 radio spot

company -         
 broad interest

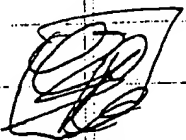


VI ANTI FLOOD When printed - can be bar coded, time of  
date stamped, no of times  
unique to machines that printed it.

~~Anti~~ duplicate  
flood

shut of machines

VII - can limit # of times a user prints  
- shut of ~~machines~~  
that exceed 9



called programmers -

quantity of  
purchased data

browser / email -

VIII

Printer Cart - print all

[ add things to printer cart  
select web site  
print pages only

IX cannot screenshot app -

Mac View

File Window  
IC

ValuePass.com -- expires December 30, 1999

**LINENS  
n  
THINGS**

**Save \$5.00**

**Linens n Things**

On any \$15.00 purchase or more.



www.valuepass.com 28682171

00000000388 20036  
02 (08/11/99 12:26PM)

Coupon not valid toward the purchase of Calphalon, Krups, Royal Velvet, JA Heneckels, or LNT Gift Certificates.



ValuePass.com -- expires August 31, 1999



**20% OFF**

**Photos from Photos**

No negative needed!  
Hit MORE INFO to  
locate a Ritz Camera  
near you.

Everybody wants a copy. Limit 5 per coupon.

**20% OFF**  
Photos from Photos



www.valuepass.com 28682171

00000000162 20036  
01 (08/11/99 12:26PM)

Not valid with any other offer.



ValuePass.com -- expires September 30, 1999



**33% OFF**

**Wolf Camera**

Not valid with any  
other offer. Limit  
one roll per coupon.  
Coupon valid for all  
C-41 color print film  
only.

Wolfpack Members Also Receive 2nd Set Of  
Prints FREE!\*



www.valuepass.com 28682171

00000000100 20036  
01 (08/11/99 12:26PM)

1-Hour service available for 35mm only (as work  
load permits). We Use Kodak Premium Royal  
Paper.



ValuePass.com -- expires December 30, 1999

LINENS  
n  
THINGS

Save \$5.00

Linens n Things

On any \$15.00 purchase or more.



www.valuepass.com 26682171

000000000388 20036  
01 08/11/99 12:23PM

Coupon not valid toward the purchase of Calphalon,  
Krupps, Royal Velvet, JA Heneckels, or LNT Gift  
Certificates.



ValuePass.com -- expires August 15, 1999



**FREE**

**Crayola Crayons 24-pack**



With any \$10 Craft  
purchase. One  
coupon per customer,  
per day please.

Hit the MORE INFO button below to locate a  
KB Toys near you! This coupon may only be  
used on regular priced merchandise.

[www.valuepass.com](http://www.valuepass.com) 28682171

XXXXXXXXXXXX11/92 200/36  
01 08/11/99 12:23PM

May not be used in conjunction with any other  
coupons, discounts or sale offers. Associates: Please  
use "Discount" key to process FREE Crayola  
Crayons 24-pack. Discount #1000876

AUGUST

NOTES

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p>

**From:** Michael R. Walsh <mrw@well.com>  
**To:** sboal@boal.com <sboal@boal.com>  
**Cc:** mrw@well.com <mrw@well.com>  
**Date:** Saturday, June 06, 1998 9:33 AM  
**Subject:** semi-proposal

---

Steven,

I would have sent this last night but I nodded off...

This is a proposal that (if I understood you correctly) outlines those things that you need me to do for this project. I've gone into enough detail to feel reasonably confident about my time estimates. If this proves we're in the same neighborhood then we should go ahead and sign papers and I can get to work.

I'll be home all day except an errand or two. We'll talk soon.

Mike

[proposal follows]

=====

## Proposal for the Internet Coupon Service (ICS)

### Overview

ICS is a subscription service that allows customers to get special offers from ICS advertisers. ICS customers can check off various keywords or categories that they find of interest. Whenever an ICS customer logs on to the Internet, they receive coupons associated with their personal profiles. ICS advertisers can thus target special offers to a customer base that is predisposed to their products.

### Content

The basic data item in the system is the coupon, which consists of:

- a GIF or text message. text may contain mail-merge type fields to allow personalization of the coupon.  
(we should avoid fullblown HTML here)
- an expiration date
- category tags (why this user wants this coupon)
- a URL (optional) in case the customer wants more information about the coupon offer

Exhibit D Walsh  
Memorandum

6/6/98

Coupons are treated like e-mail, but they exist separately from the customer's e-mail account.

## Client Software

The ICS Client Software consists of:

- a driver that activates the ICS viewer whenever the customer connects to the Internet, and shuts it down safely when the customer logs off
- a local database with the active coupons for the customer
- a viewer that logs into an ICS server, retrieves and displays the coupons, allows the customer to register and de-register categories of interest

The viewer is a scrapbook type of application, with a large viewing area for displaying one coupon, and navigation buttons across the bottom. The navigation buttons are:

- "Next" and "Previous" for viewing new coupons
- "Tell Me More" to activate the browser with the coupon's URL
- "Find..." to locate coupons with a particular category
- "Print..." to print out the coupon

The coupons are viewed in order of expiration date. The customer may change this (by a menu command) to view his coupons by category.

A customer uses the ICS viewer to register his areas of interest. A menu choice will bring up a dialog with (what is likely to be) a huge array of possible keywords, ranging from general subjects to particular vendors. When a customer approves a change of keywords, this change is sent to ICS and his profile is changed accordingly.

When the ICS viewer is used for the first time, the customer will be prompted for the usual information like name, address, etc., which will be stored in a local profile. The ICS viewer uses this information on messages that will personalize the coupon for the customer.

The ICS viewer discards expired coupons automatically.

## Server Software

The ICS Server Software consists of:

- a client database, recording for each client his keyword collection and his active coupons
- a coupon database, keeping server copies of the coupons to be



delivered

- a coupon generator for constructing and delivering coupons to the appropriate customers (do we want to give this program to advertisers who would upload them into the system, or would we want to control this centrally to avoid potential problems?)

All ICS servers must be partitionable and expandable (they must operate as a single program that extends over a number of CPUs).

When a coupon is entered into the system, it is submitted to the client database. All customers whose tags match the coupon acquire the coupon for delivery. If the customer is currently online that coupon is re-transmitted immediately. The coupon reference is kept in that customer's record until it expires. When it expires, it is expunged from all customer records.

We'll need a "Forward" function when client records are moved to different servers.

#### Technical specifications

The client viewer will be implemented in Java.

The client database and driver may be implemented in Java but may be converted to C++ if performance is an issue.

The server databases will be implemented in Java so they can interact with client applications. They may use commercial database software for the heavy lifting.

The coupon generator will be implemented in Java.

Maintenance applications can probably be implemented as shell scripts in either Unix or NT, depending on the server OS. Since the server programs will be written in Java, the actual hardware they run on is not important to the working of the system.

#### Project Estimates

Estimated time to complete various components of the system:

Client Software	Man-days (est.)
Driver	4 (I've never done a W95/NT driver before)
Database	1
Viewer	10 (not difficult, just a lot of it)

Server Software	Man-days (est.)
Client DB	1
Coupon DB	1
Coupon Generator	1
Other Maintenance	1

Testing	
for recovery	3
for extensibility	3

Total time            25 man-days = 5 calendar weeks

#### Personal Requirements

I'll need a development machine. It doesn't have to be big iron, but it should have 128 MB RAM, 1 GB HD (enough for the dreaded 95/NT setup), a 56KB modem, (an Ethernet card?,) Symantec Visual Cafe 2.0 and Microsoft Visual C++ 5.0.

Since I'm preserving my day job, I'll be working on average 4 hours M-F evening and 10 hours Saturday and Sunday. I can deliver this project in six weeks on that schedule and there is still a tiny bit of slack available should I need more time.

Harlequin will likely be sending me to Denmark in August. I have to be finished with this project before then.

# Kwik Key Lock & Safe Co., Inc.

Contractors License #558821

1949-A El Camino Real

MT. VIEW, CALIFORNIA 94040

(415) 945-2997 • (408) 737-9551

CUSTOMER'S ORDER NO.		PHONE		DATE	
NAME					
ADDRESS					
SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RET'D.
CC	X				
QTY.	DESCRIPTION				PRICE
1	open safe				9500
	by open door				250
PAID OUT					AMOUNT
					9750
TAX					
RECEIVED BY					TOTAL
					9775

B PRODUCT 610

All claims and returned goods must be accompanied by this bill.

95088

To Receive  
100-225-2225 or 100-225-2226

Thank You

100-225-2225 or 100-225-2226  
100-225-2225 or 100-225-2226  
100-225-2225 or 100-225-2226

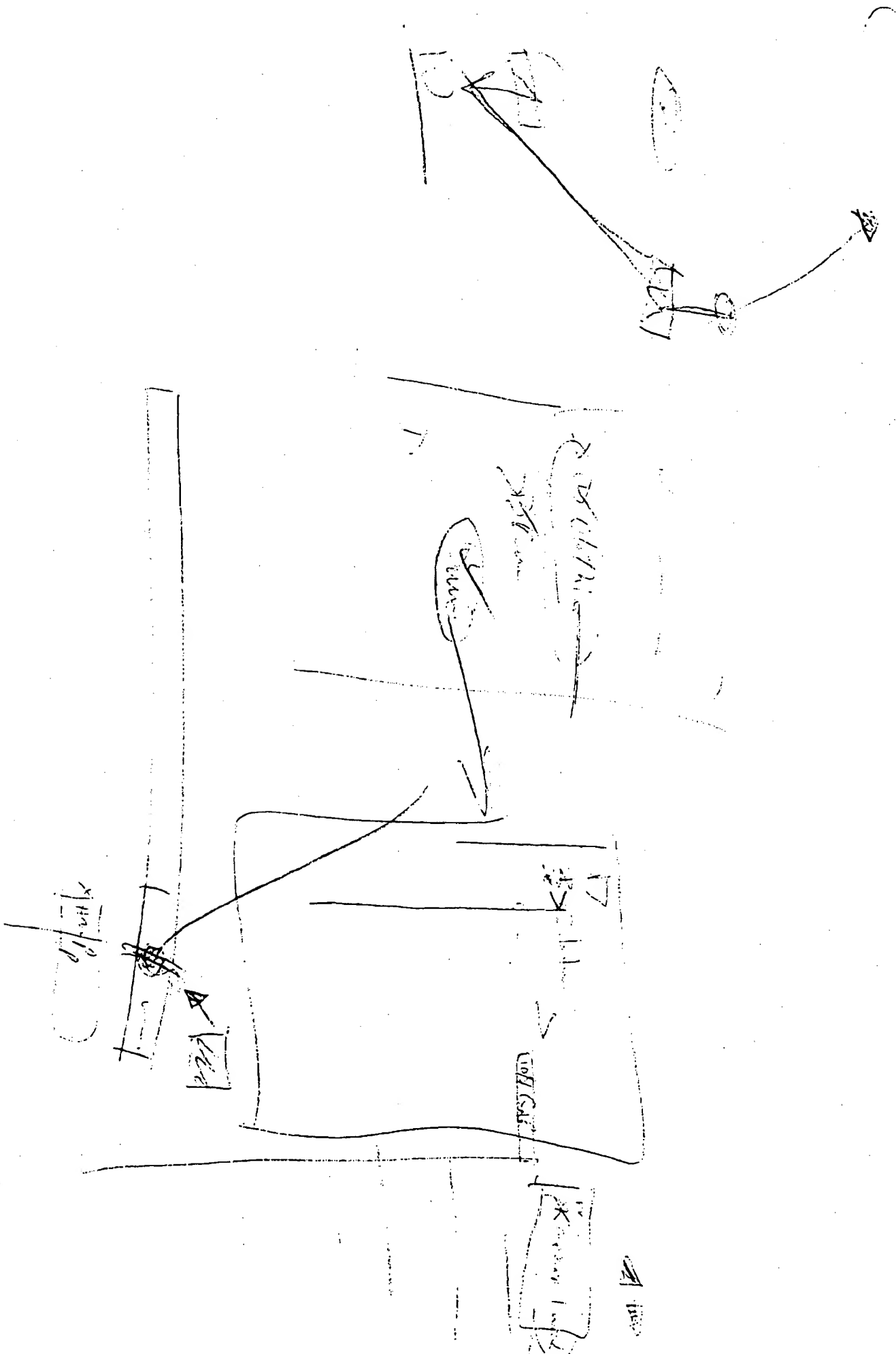
100-225-2225 or 100-225-2226  
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100-225-2225 or 100-225-2226  
100-225-2225 or 100-225-2226



**Ronald P. Kananen**

**From:** Steven R. Boal [sboal@boal.com]  
**Sent:** Monday, January 04, 1999 1:12 AM  
**To:** rpk@raderfishman.com  
**Subject:** Some notes to start from...

The main component of the storecoupon.com system is a proprietary application (locally resident program) that installs itself onto the Windows operating system. Its presence is made known by a permanently resident icon situated in the lower right-hand corner of the screen, in an area known as the taskbar. The application can be downloaded from a number of sources, including, but not exclusively, the storecoupon.com home page on the Internet. Anyone with a computer that runs the Windows operating system, and has a connection to the Internet may access the application for the purposes of downloading and installing it on their computer. Users of the system are not required, indeed, are not permitted, to provide any personal profile information as a prerequisite to installing the application. Once the application has been locally installed, and a connection to the Internet has been established, the system asks for three pieces of information from the user. These pieces of information are of a general nature, the zip code of the person installing the application, their State, and their email address. The zip code and state information are used as a high-level check for a valid entry, and the email address is so that they may be informed of system updates and upgrades. Users have the option of not being added to the email list by deselecting the "add to email list" option. Any other profile information offered by the user is voluntary, and not a prerequisite to using the system.

Following the application installation process (above) the user is never required to provide any further profile information to begin receiving savings certificates. However, should the user not wish to receive a specific category of savings certificate, at the user's option, that specific category may be turned off.

There is not, and will never be, a connection, either one way or two way, between the coupon providers and the storecoupon.com proprietary network. All coupon information MUST be submitted manually to the storecoupon.com merchant services department, where it will be voice verified with the submitter, and then manually keyed into the storecoupon.com central database. LIKEWISE, the coupon providers will have no connection to the storecoupon.com network for the purposes of receiving usage statistics. This information is considered proprietary and confidential to storecoupon.com

\*\*\*\* Some additional notes on the data-flow \*\*\*\*

Each time the application attempts to update itself via the Internet, the following actions take place, in the order specified (a diagram will follow):

1. The application issues an echo-response request (aka Ping) to determine if a reliable connection to the internet has been established.
2. If (1) is successful, the application issues a storecoupon.com proprietary "server request" from the primary entry-point to the storecoupon.com network, a server dedicated to answering this specific request type.
3. If (2) is successful, the application will receive the address of a server which will process all additional communications for the current session.
4. If (3) is successful, the application will issue a storecoupon.com proprietary "session open" request from the newly designated session server assigned in step (2).
5. If (4) is successful, a valid response will return to the application, at which point the application will send to the session server assigned in step (2) the history of all actions taken by the application since the last time it had a valid session request.
6. If (5) is successful, the application will then download all new information stored in the central storecoupon.com database.
7. If (6) is successful, the application will delete any expired information.
8. If (7) is successful, the application will send a storecoupon.com proprietary "latest update" message to the session server assigned in step (2).
9. If (8) is successful, the application will receive a storecoupon.com proprietary "session closed" message from the session server assigned in step (2).

What Happens on  
January 1, 2000?

- └ Proxy Server
- └ Firewall
- └ DHCP Server
- └ TCP/IP Router
- └ PPP Server

**VICOMSOFT**  
**SoftRouter Plus**



**DAVECENTRAL**  
SOFTWARE ARCHIVE

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E-mail - Clients

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## storecoupon.com 2.0B

### Freeware

This program bridges the gap between online and offline shopping by bringing coupons for various stores to your desktop in categories such as apparel, health and beauty, baby bargains, gift ideas, travel, and groceries. It delivers national and local coupons, giveaways, and contests directly to your desktop for use both online and offline. Once you find a coupon you'd like to redeem, you can go to the Web site and find locations of the stores near you or shop online.



[storecoupon.com Home Page](#)



Publisher: [Xadvantage Corporation](#)



[Download 32-bit version \(0.58M\)](#)



Platforms: Win 95/98, Win NT 3.51, Win NT 4.0

<< [Previous Product](#) - [Next Product](#) >>

### Broken links?

Use this form to report broken links for this program.

☐ Broken home page link

☐ Broken download link

Other problems:

**ANDnetOVER**

[AndoverNews Network](#)  
[FreeCode](#)  
[Internet Traffic Report](#)  
[IT Manager's Journal](#)  
[MediaBuilder](#)  
[Slaughterhouse](#)  
[TechMailings](#)  
[TechSightings](#)

DOMAIN NAME QUERY

[Ask Reggie](#)

DAILY FEATURES

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[Cartoon of the Day](#)  
[Free Font of the Day](#)  
[AndoverNews Column](#)  
[Pick of the Day](#)

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[Ask Reggie](#)  
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[FontMapper](#)  
[GifOptimizer](#)

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### Home

- Audio
- Conferencing
- Connectivity
- E-mail
  - + Address Lists
  - + Autoresponders
  - + Bulk Mailers
- Clients
  - Acorn Email
  - AK-Mail
  - AmegaNet
  - AnyEMail
  - Becky Internet Mail
  - BravoMail
  - btml3231
  - BWMerge
  - Calypso Email
  - Canine Mail
  - CDH Mail Bagger
  - ClickMail
  - DMailWeb
  - Drag 'n Mail
  - DTS Mail
  - eGo
  - email 97
  - Eudora Light
  - Eudora Pro
  - ExpressIT! 2000
  - ExpressMail
  - EZ-mail
  - FoxMail
  - FreeMail
  - Ghost Mail
  - Handy Email
  - Hotmail Express
  - HTMailer
  - Infinite InterChange
  - Iris E-Mailer
  - JS Office
  - JustPOP3
  - LapLink Exchange Acce...
  - LeeniePad
  - Magic Mail Monitor
  - Mail Express
  - Mailbutler
  - MailCat
  - MailPad
  - MailPartner
  - Microsoft Outlook 98
  - Mulberry
  - NetMessenger
  - Odio Mail
  - OfficeTalk 98
  - Open Mail
  - Paladin IMAP4 Email
  - Pegasus Mail
  - Phone/Email Book for ...
  - Pine
  - PMMail 98
  - Postman
  - Quick 'N' Dirty Email

Exhibit F Website 2/16/99

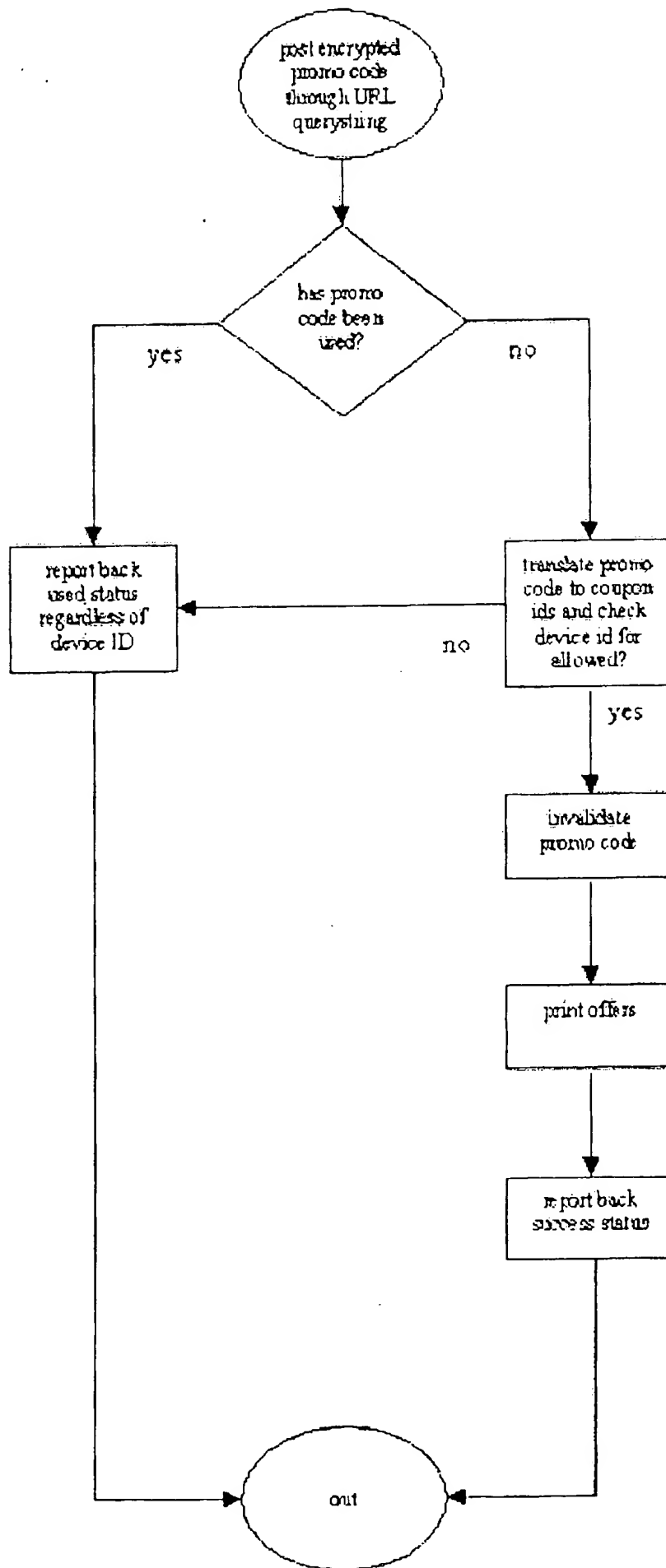
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- [QuickMail Pro](#)
- [QuickSend](#)
- [RSVP Mail Processor](#)
- [Secret Mail](#)
- [Secure Mail Lite](#)
- [Secure Mail Pro](#)
- [Shark!mail](#)
- [SmartMail](#)
- [Sneaky Mail](#)
- [storecoupon.com](#)
- [TecaMail](#)
- [The Bat!](#)
- [TopMail](#)
- [TranSoft's Mail Contr...](#)
- [TrayMail](#)
- [VirtualMessenger](#)
- [Vivian Mail](#)
- [WebMail](#)
- [Z-Mail Pro](#)
- [ZinCheck Mail](#)
- + [E-mail to Pager](#)
- + [Mail Servers](#)
- + [Misc. Tools](#)
- + [MS Exchange](#)
- + [Multimedia Tools](#)
- + [Notification Tools](#)
- + [Outlook Express](#)
- + [Signature Tools](#)
- + [Spam Fighters](#)
- + [Spell Checkers](#)
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- [Finger/Whois](#)
- [FTP](#)
- [Graphics](#)
- [Java](#)
- [Multimedia](#)
- [Newsgroups](#)
- [Programming](#)
- [Real Time/Push](#)
- [Telnet](#)
- [Video](#)
- [VRML](#)
- [Web Authoring](#)
- [Web Surfing](#)

Submit	
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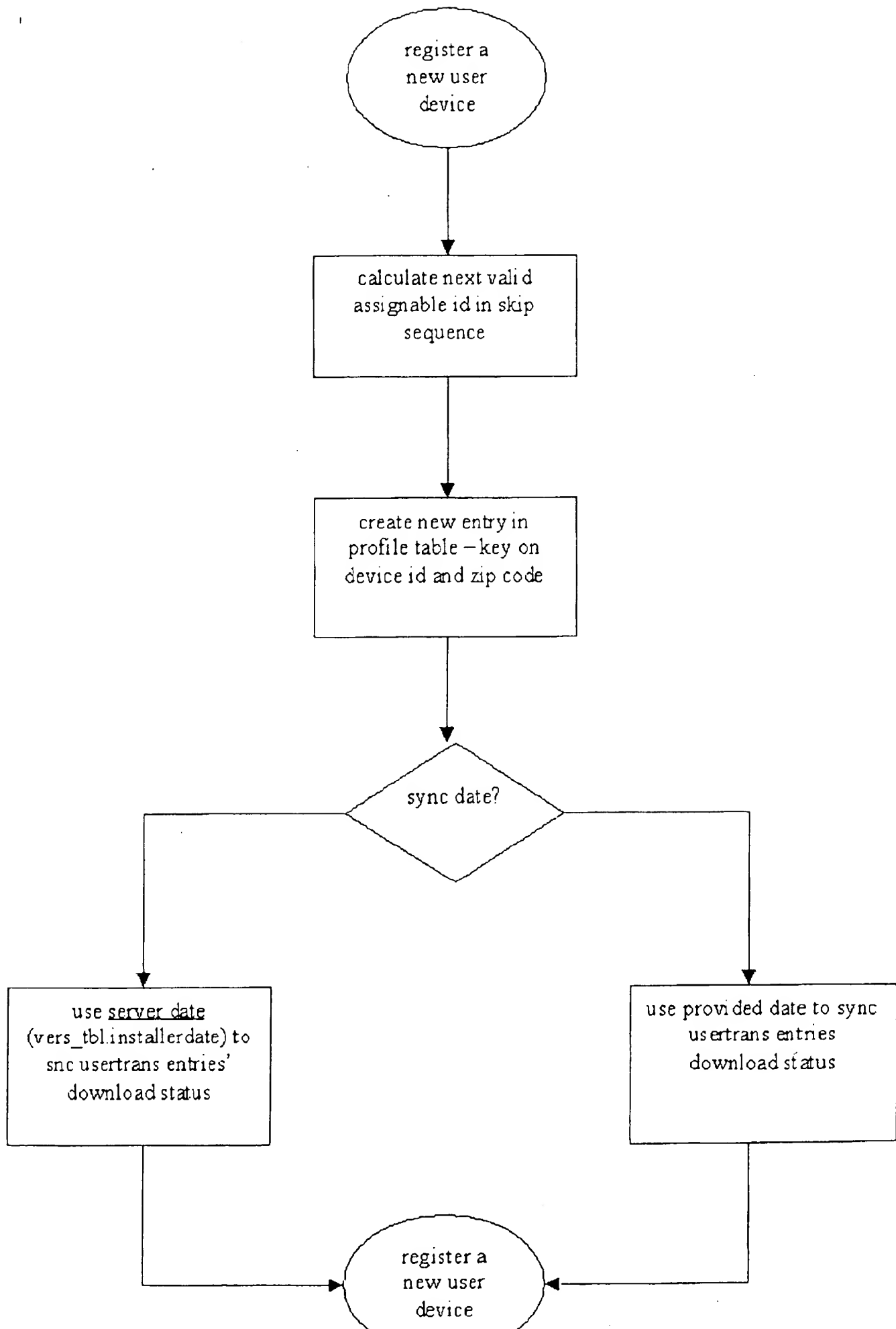
ENTER KEYWORDS

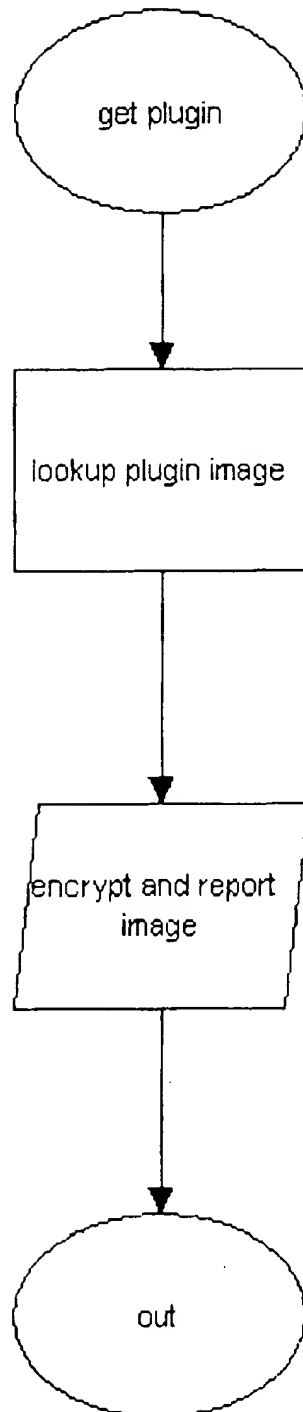
Search

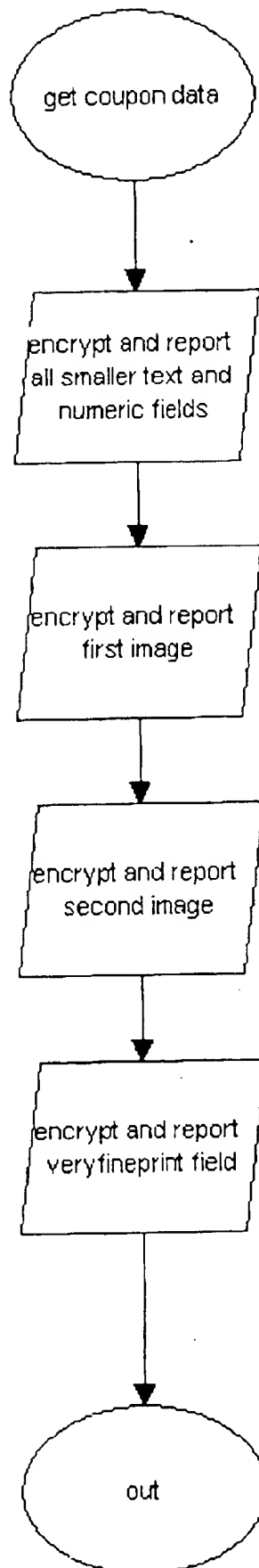












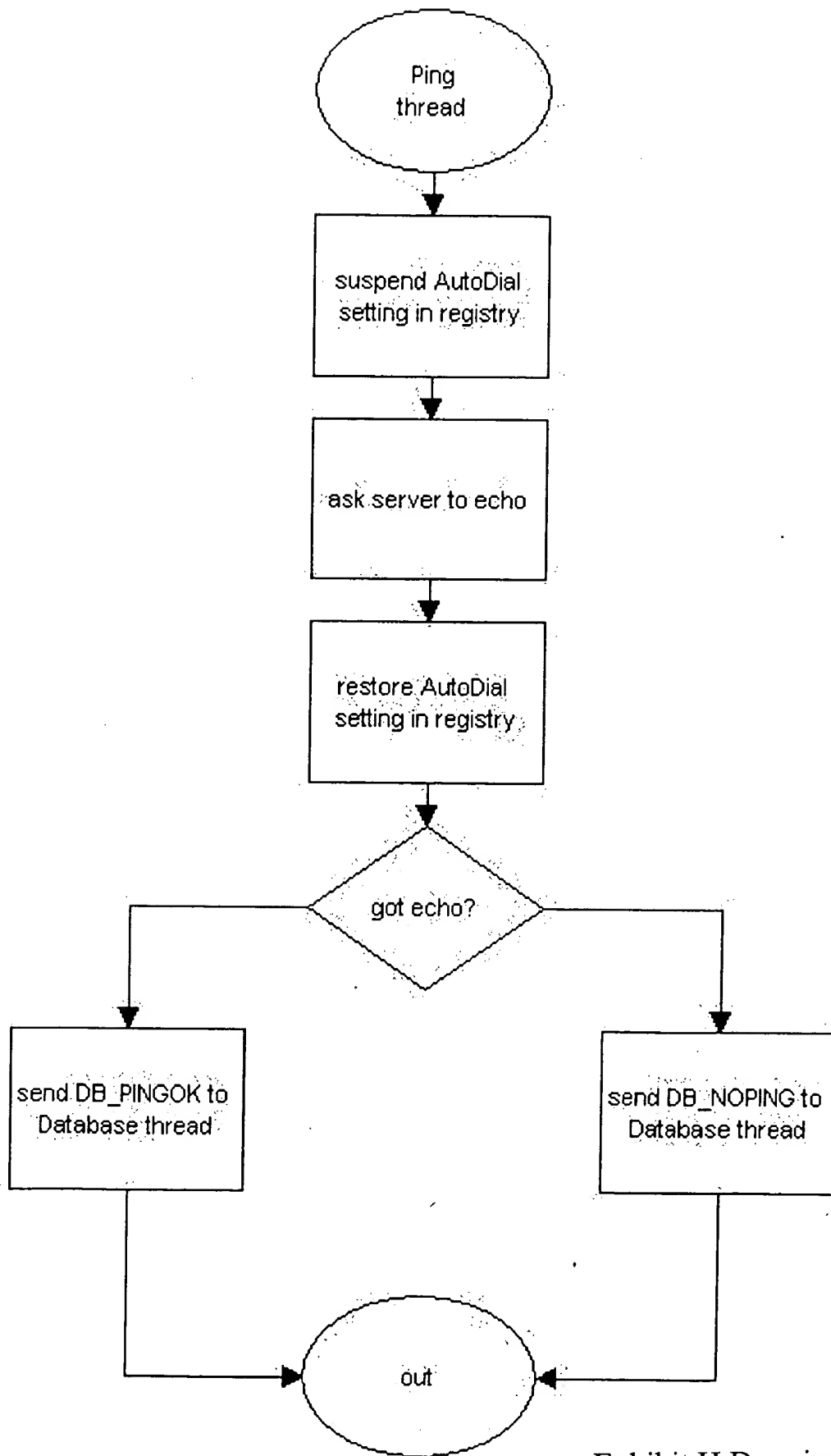
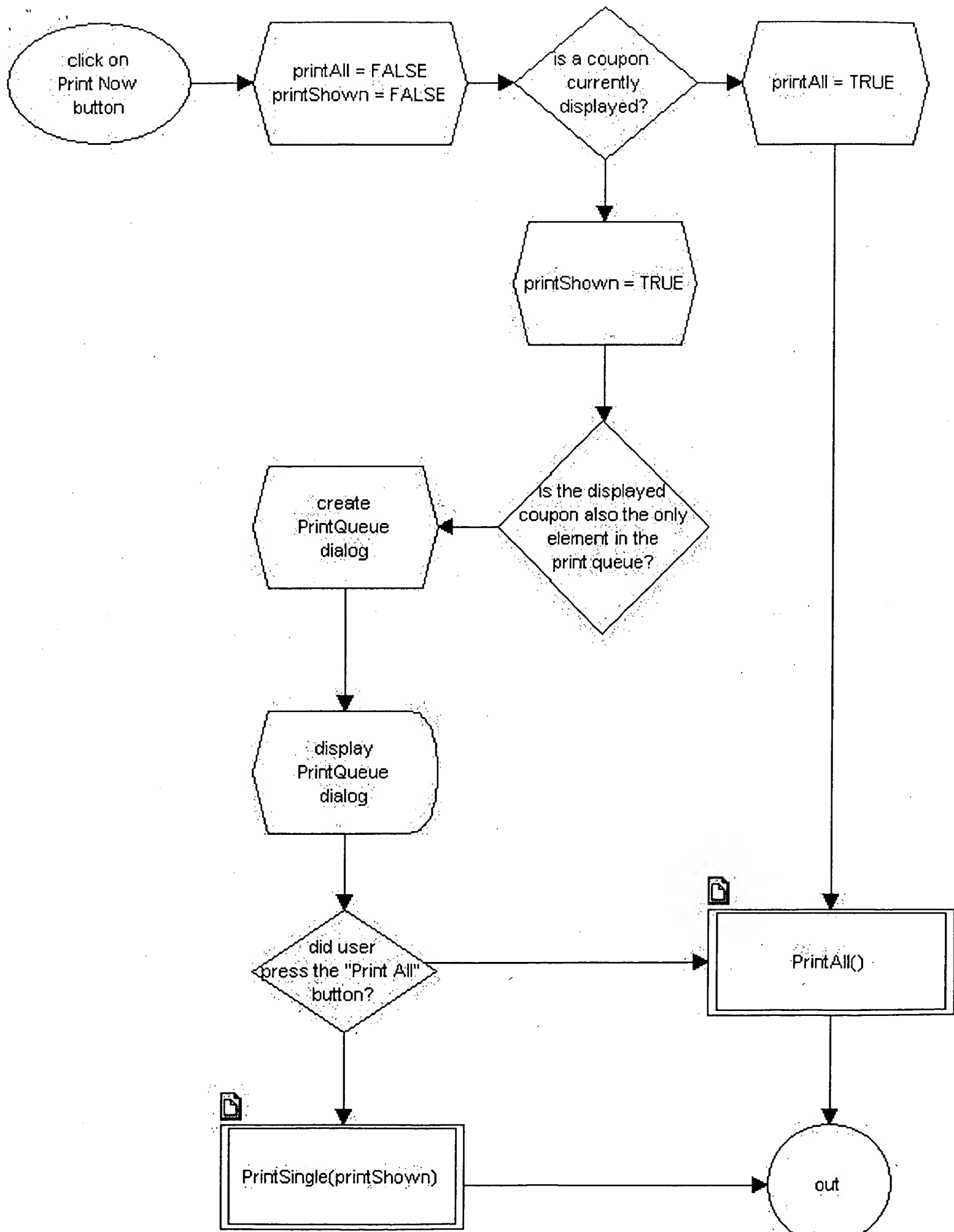
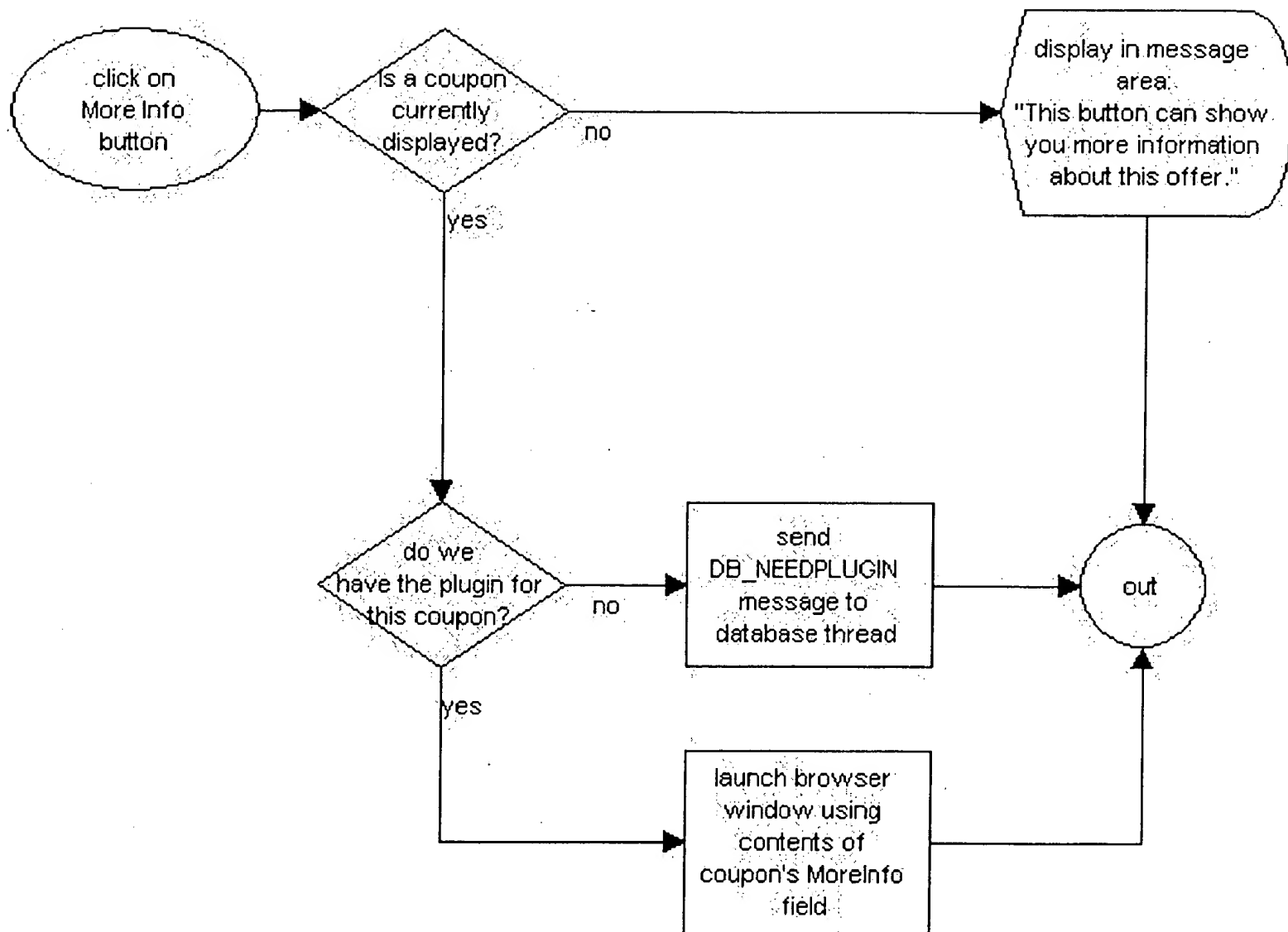
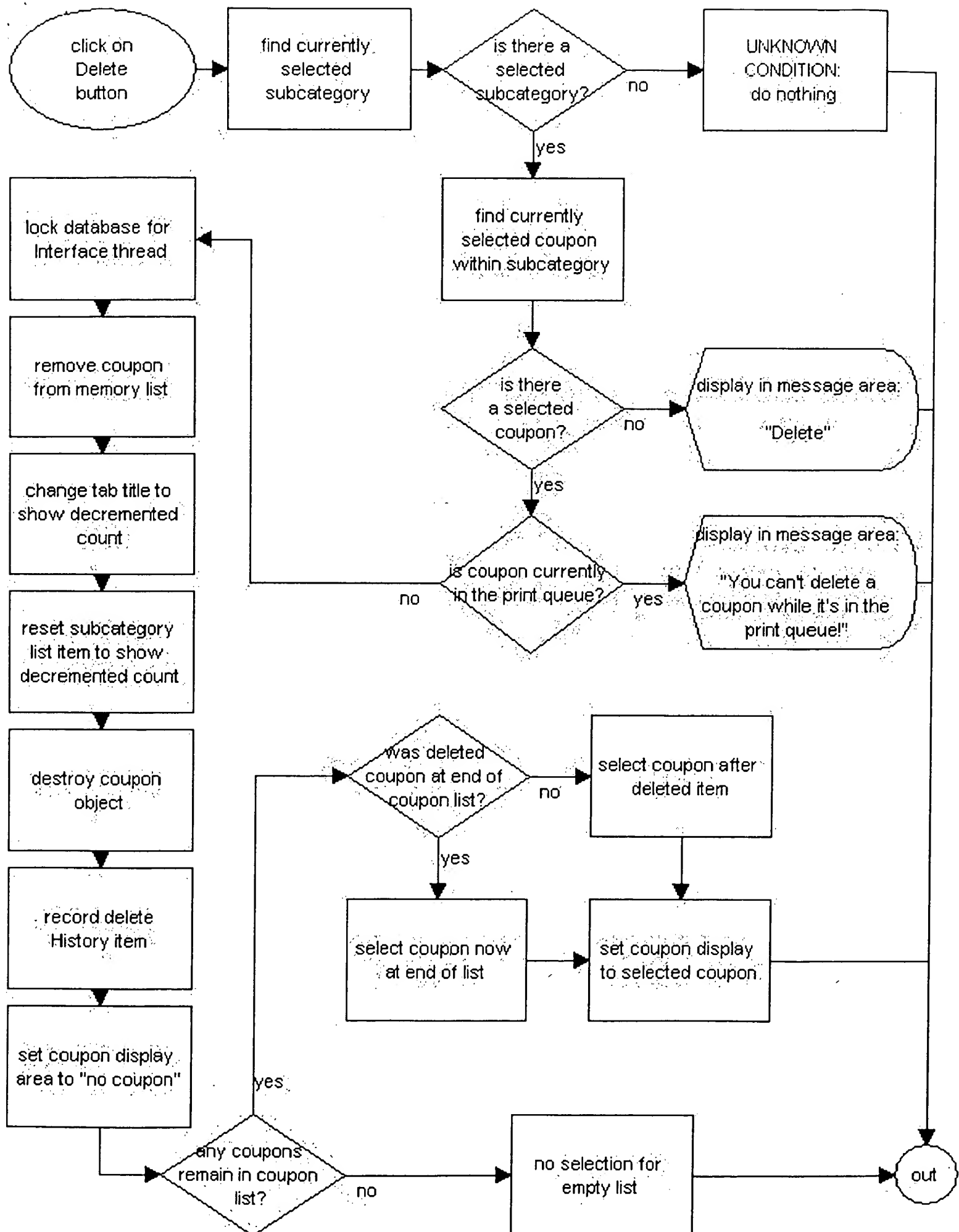
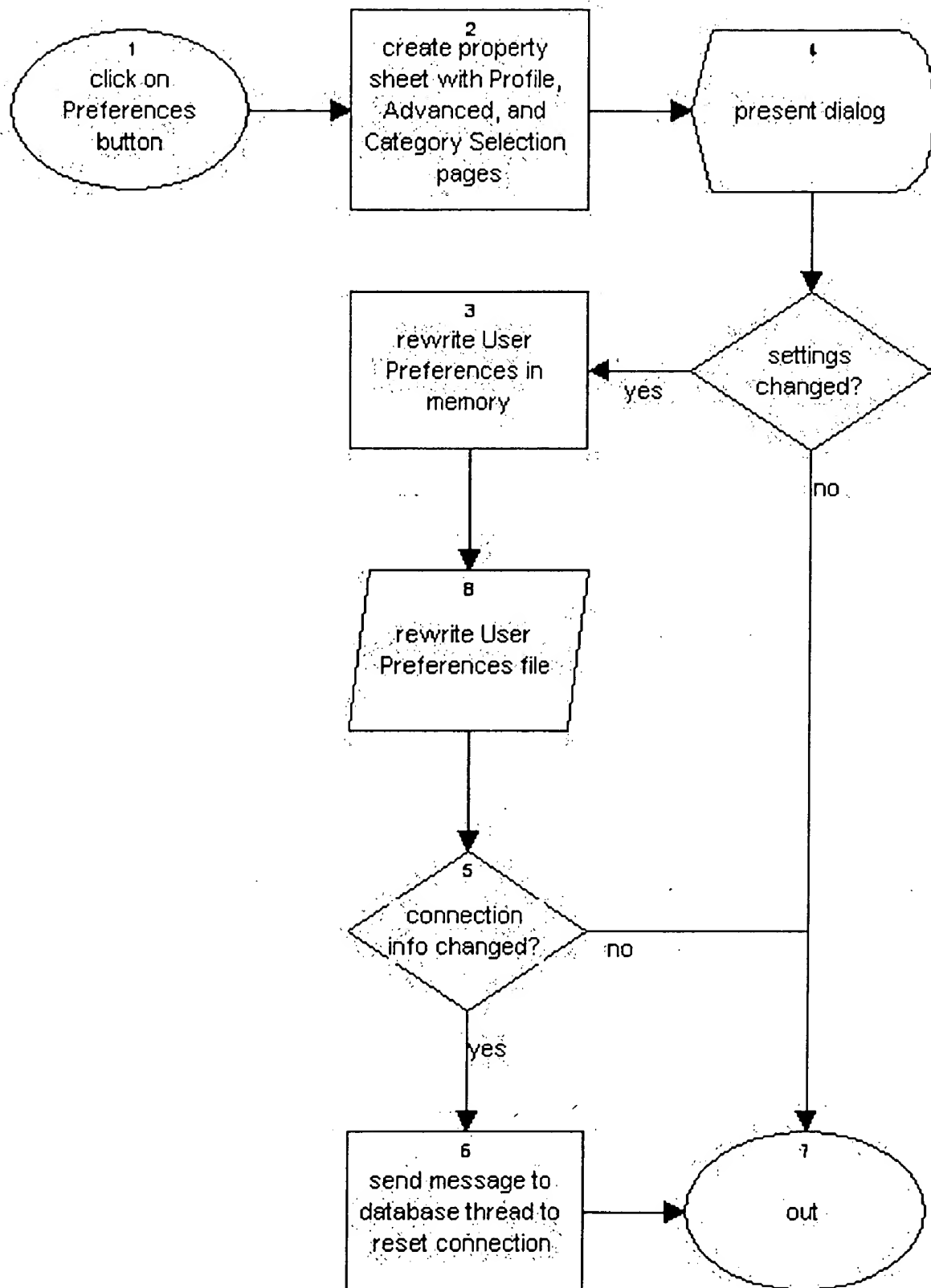


Exhibit H Drawings  
H1 to H8

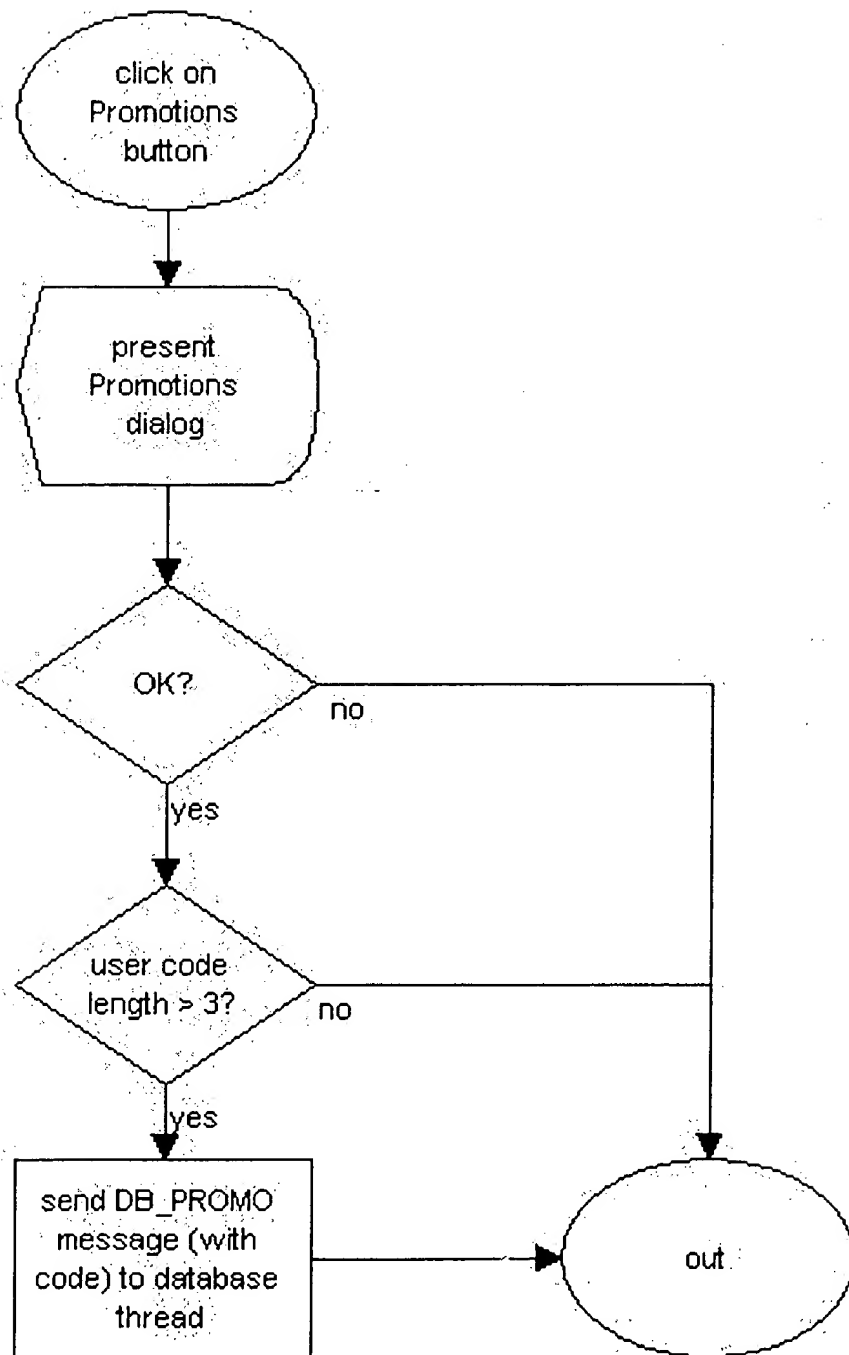


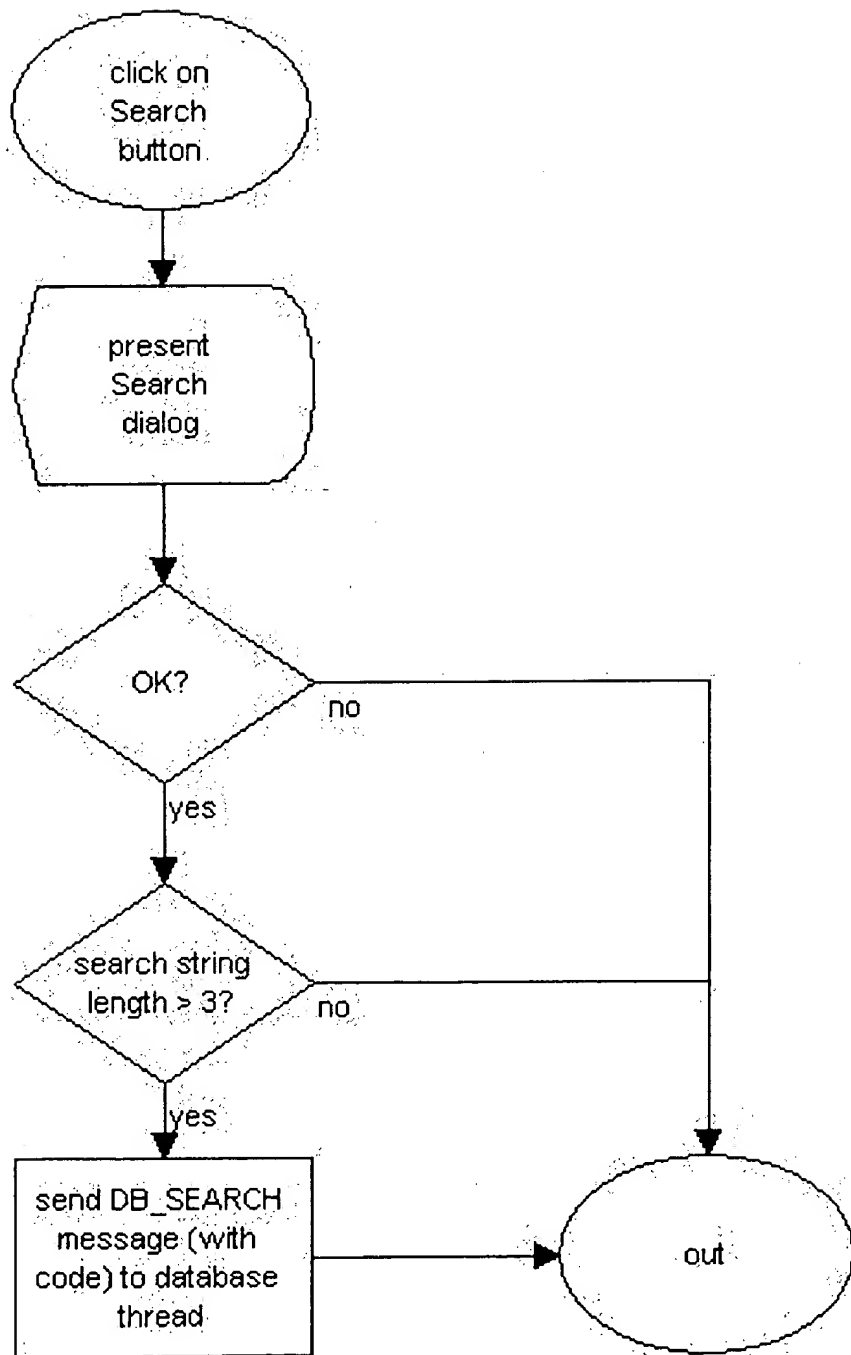


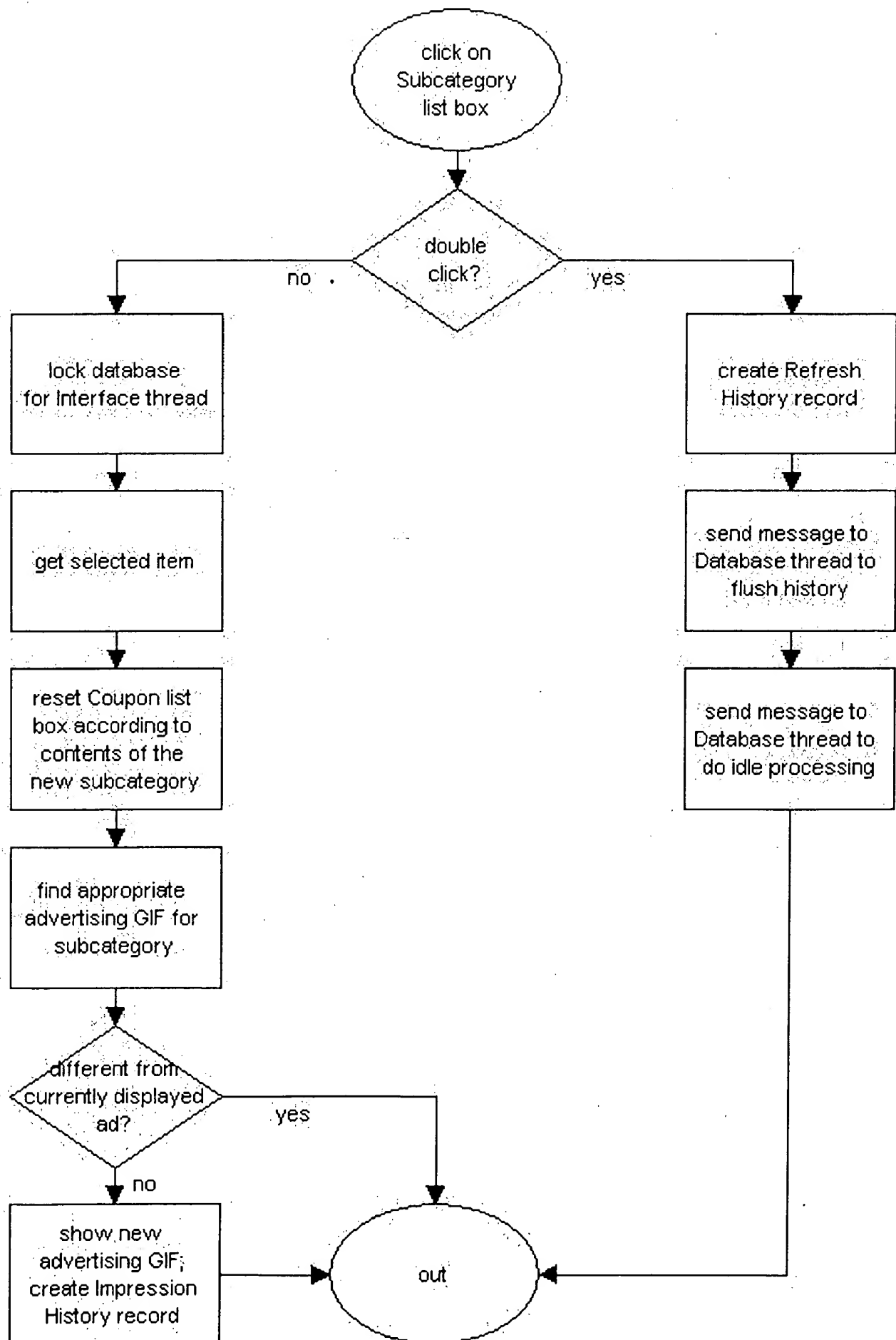


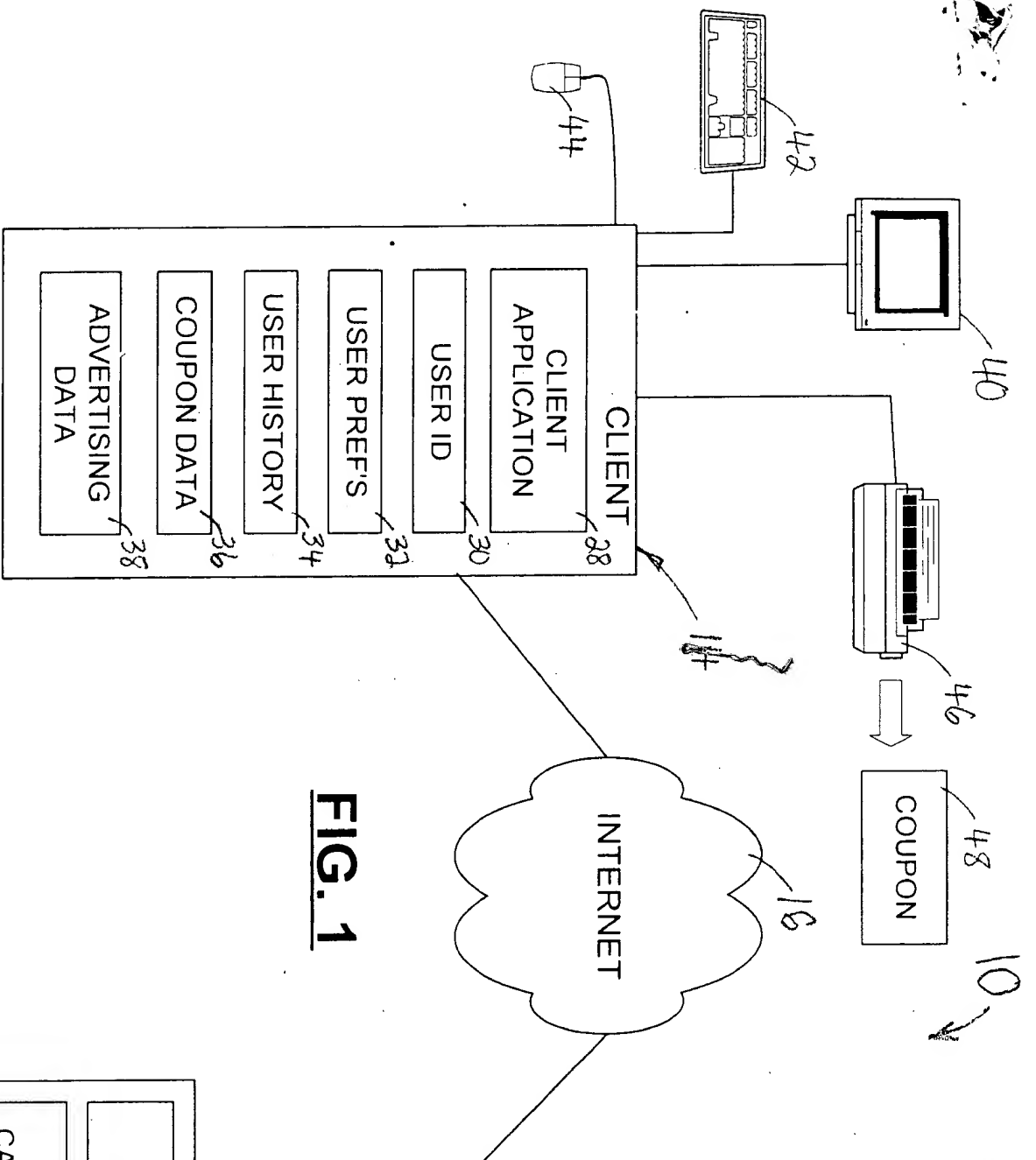




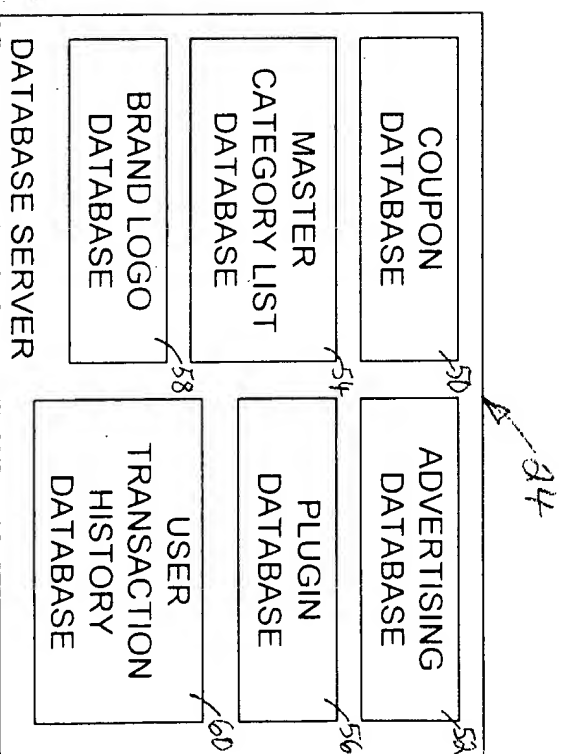








**FIG. 1**



**FIG. 2**

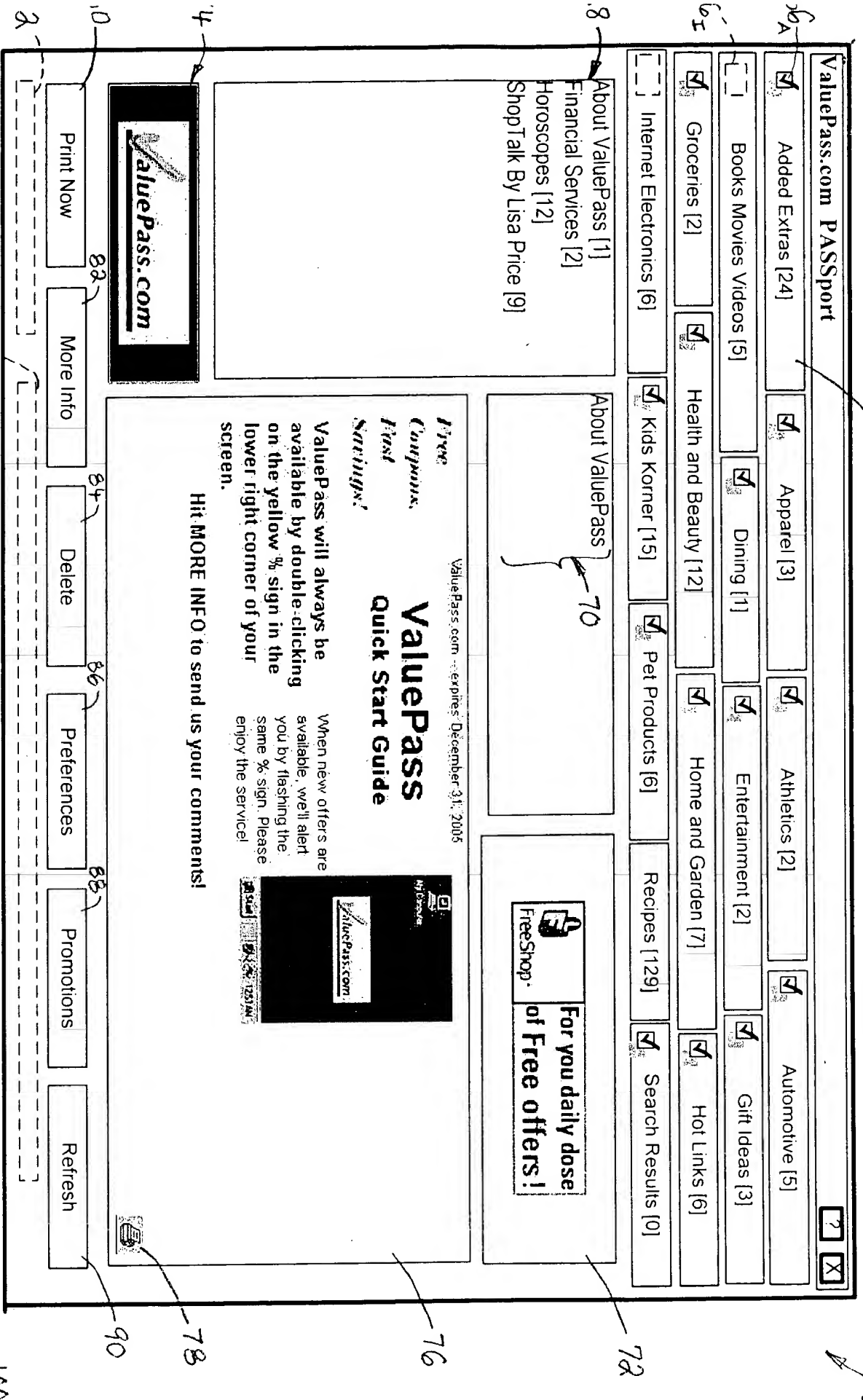
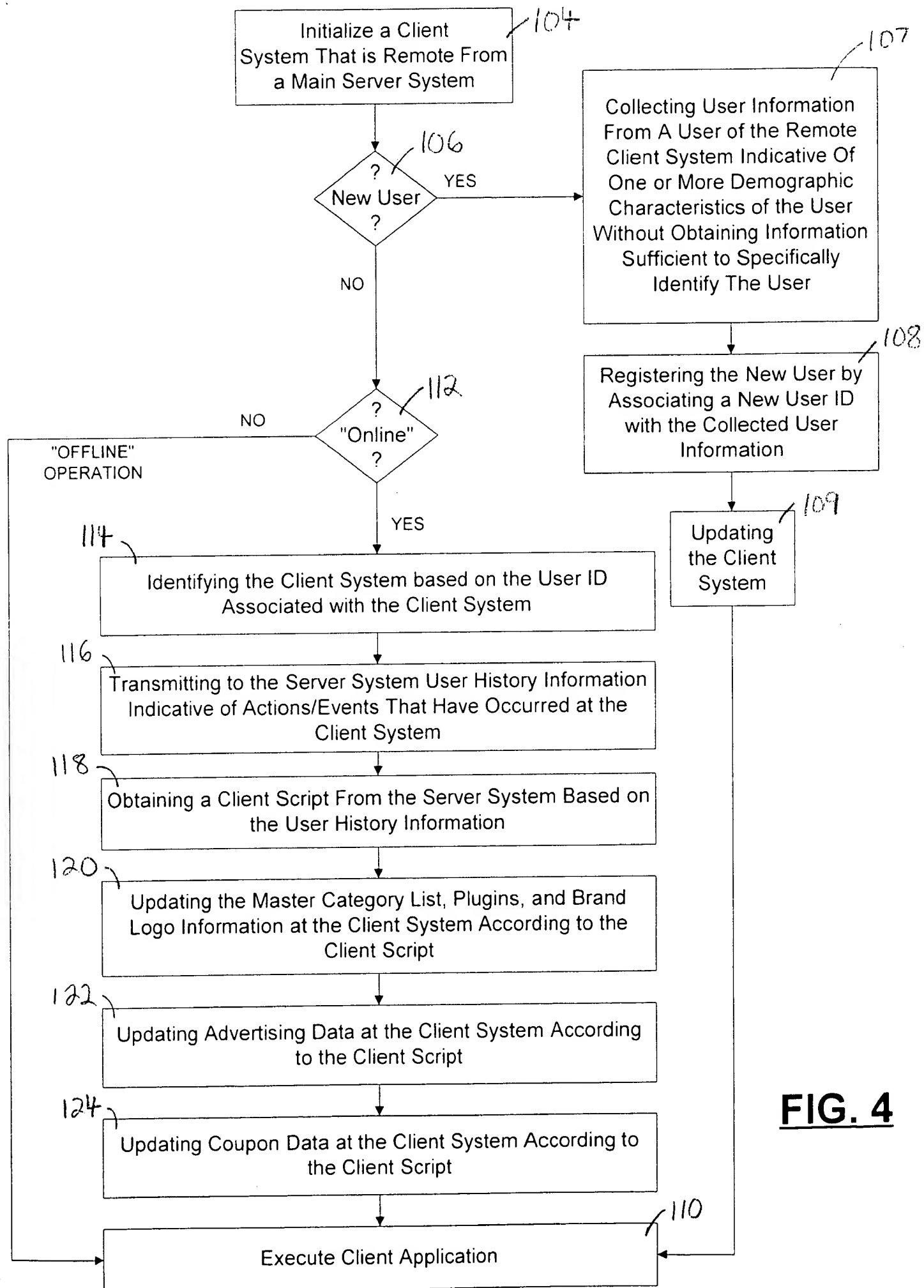


FIG. 3A

FIG. 3B





**FIG. 4**

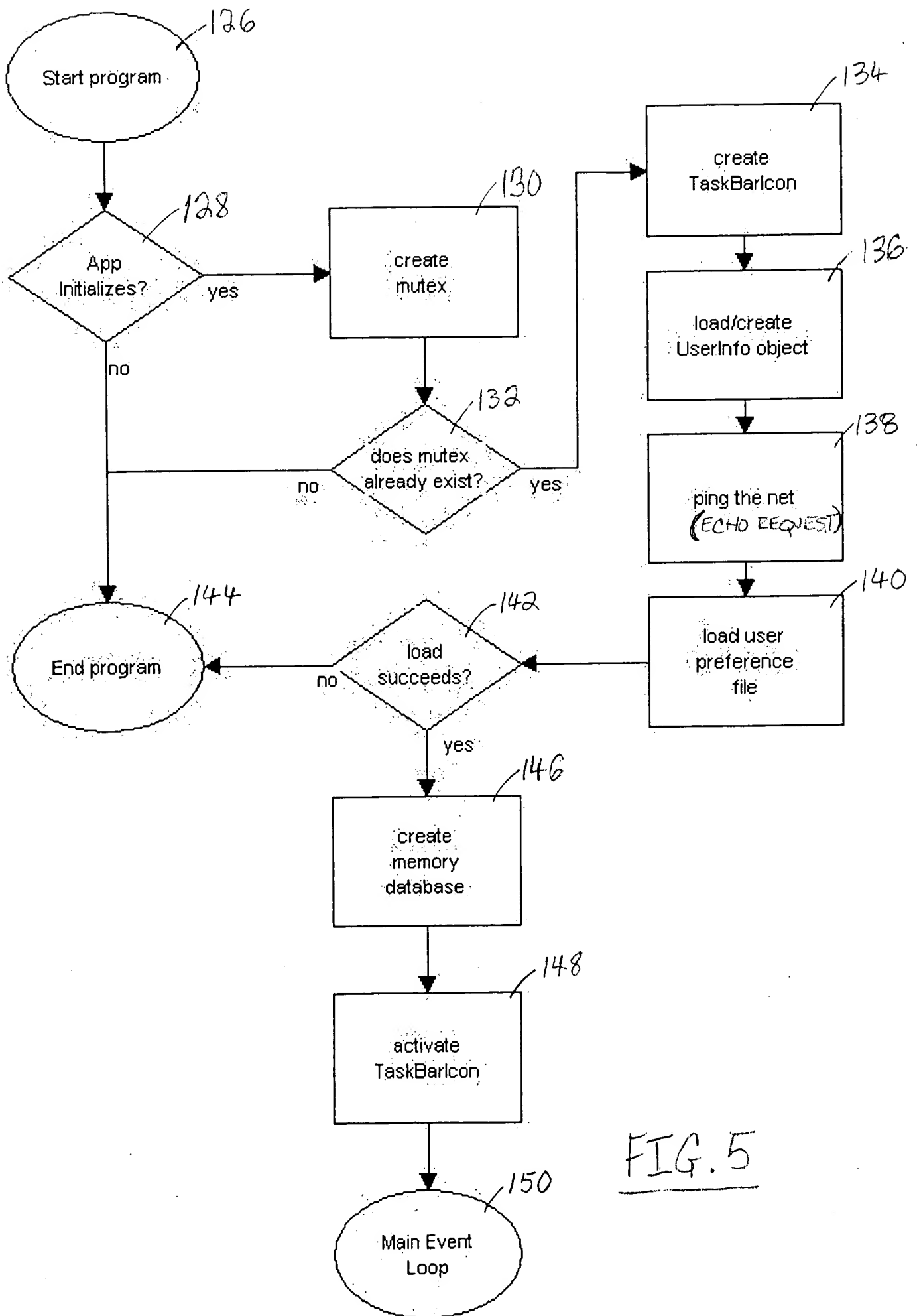


FIG. 5

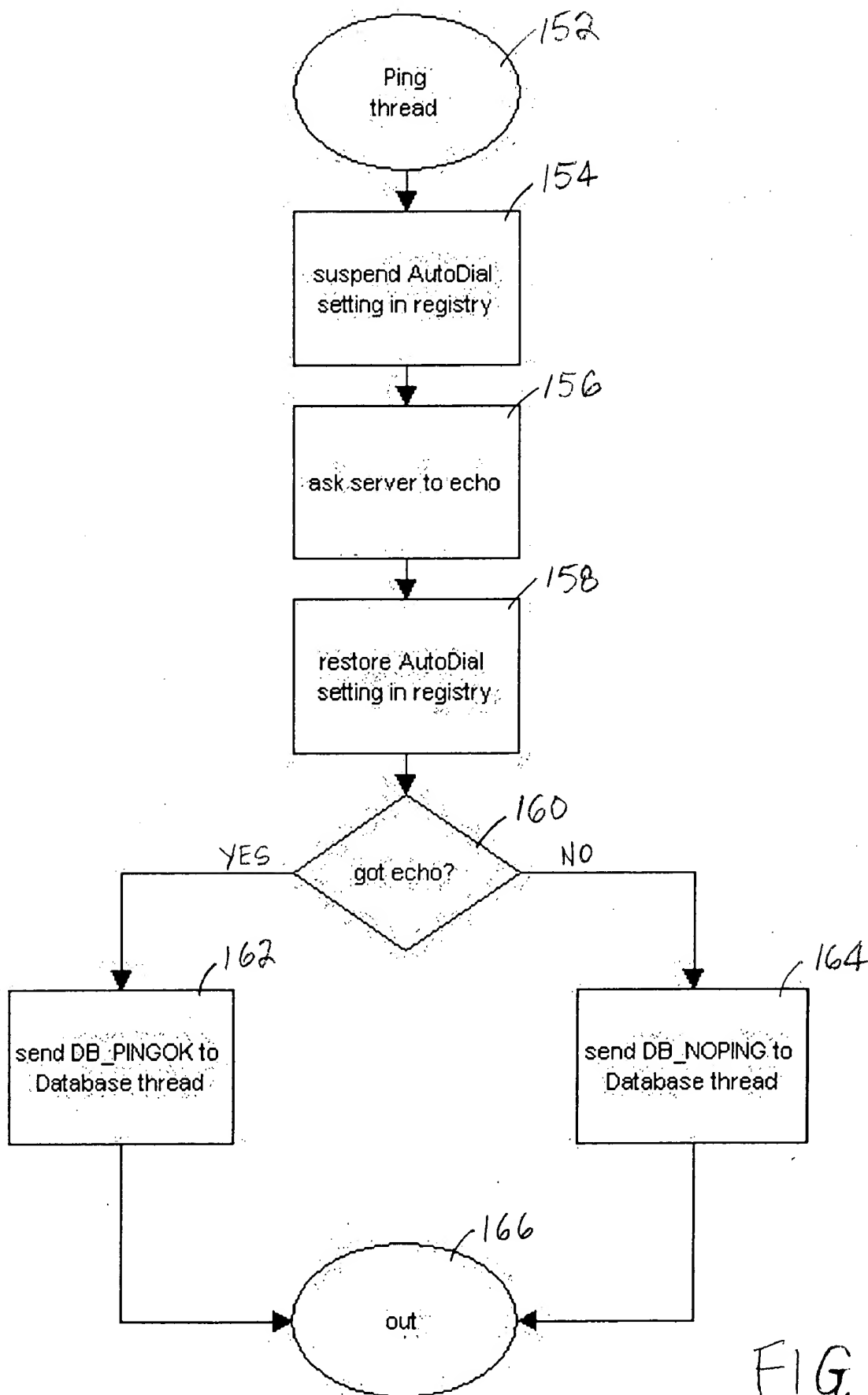


FIG. 6



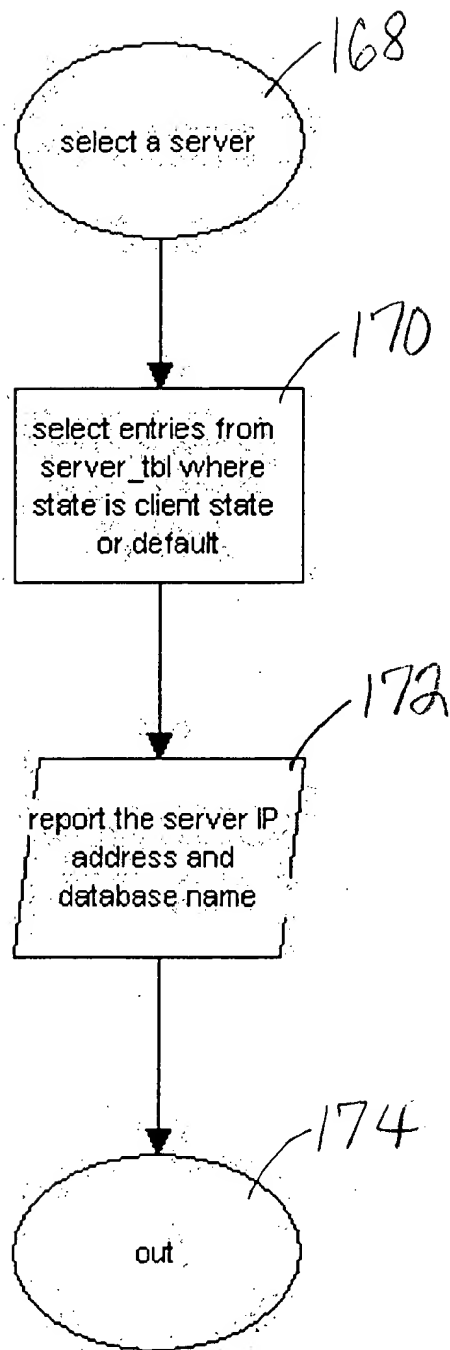


FIG. 7

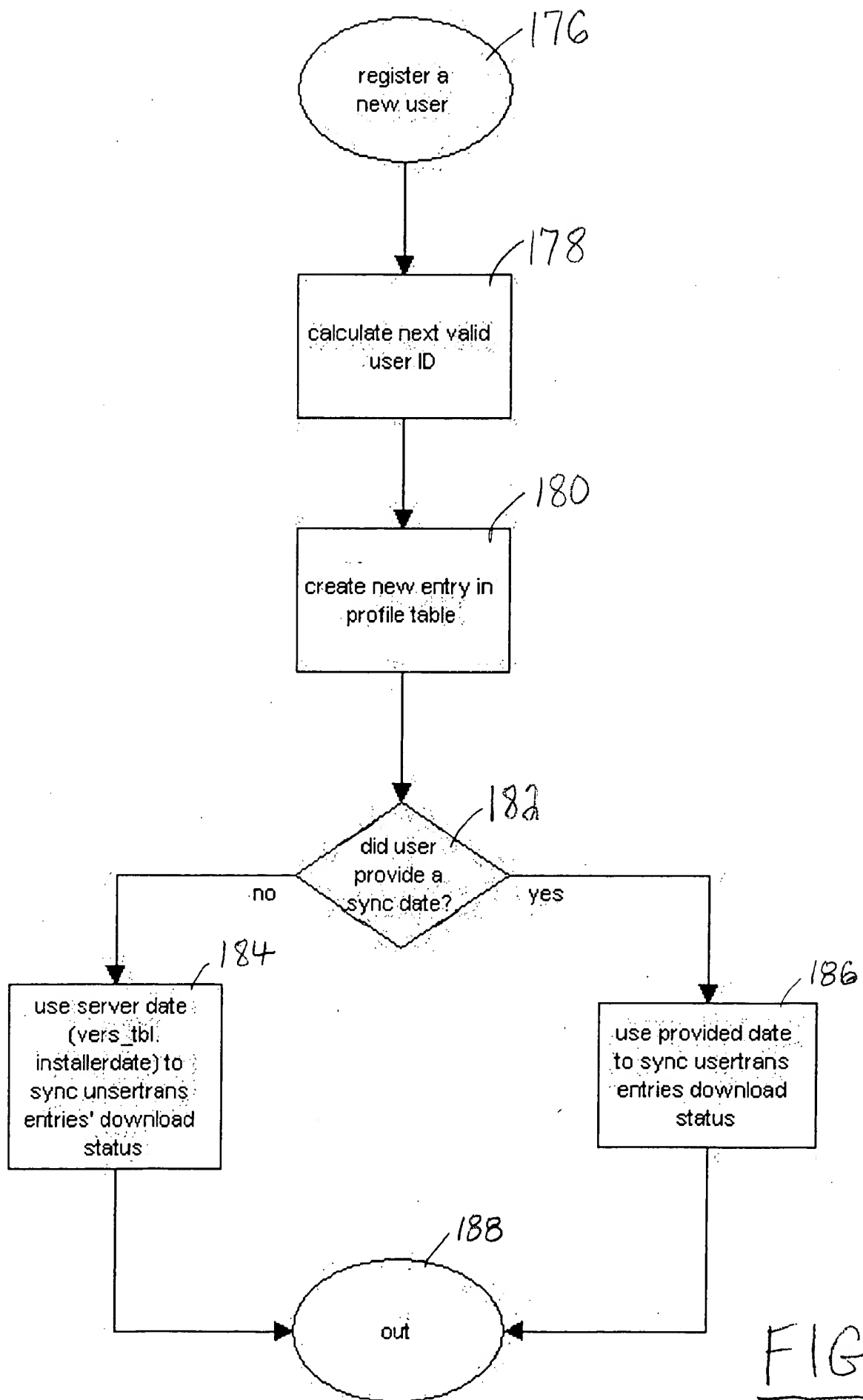


FIG. 8

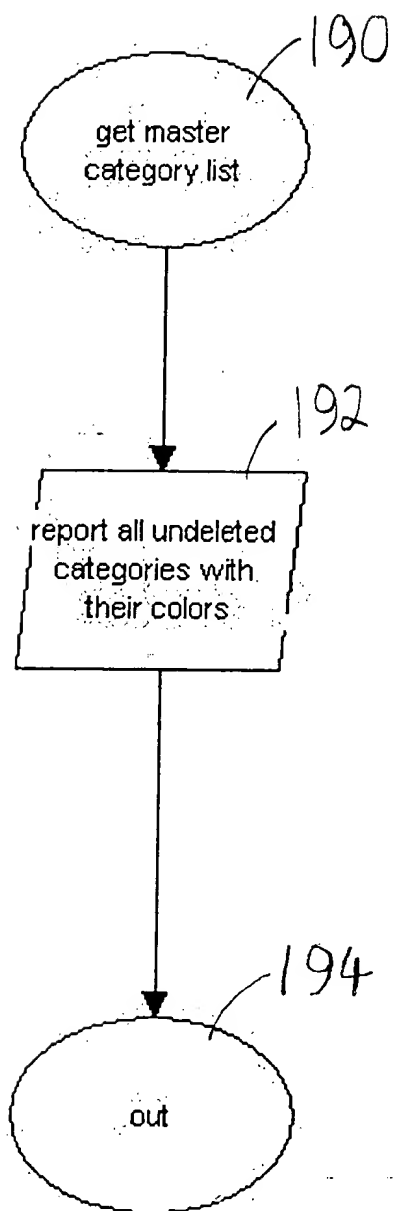


FIG. 9

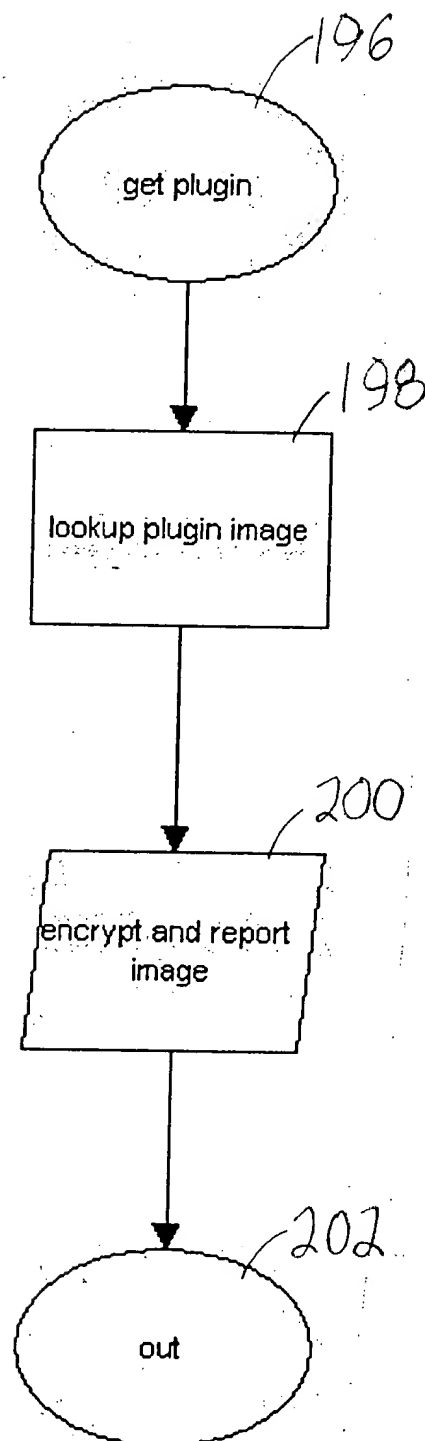


FIG. 10

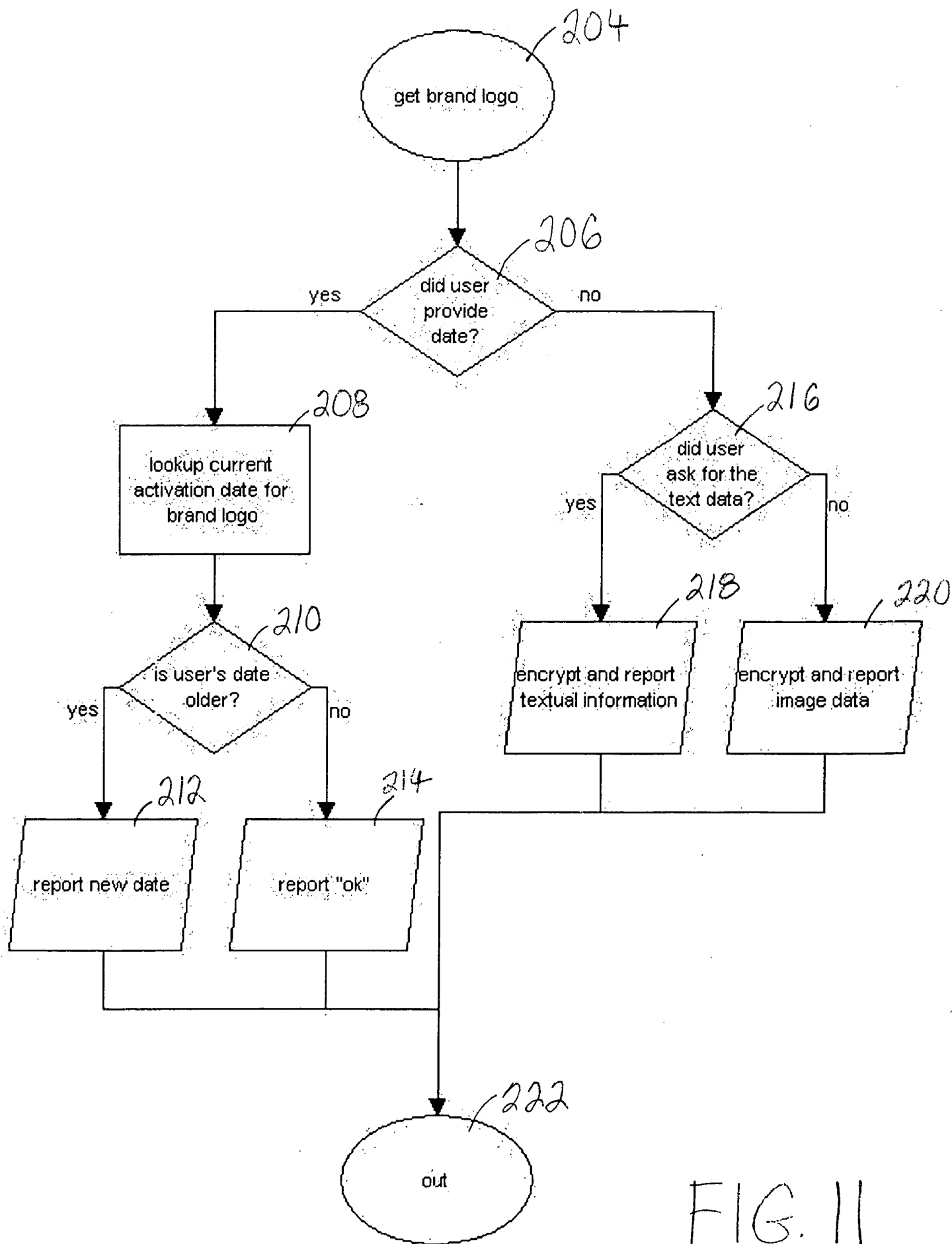


FIG. 11

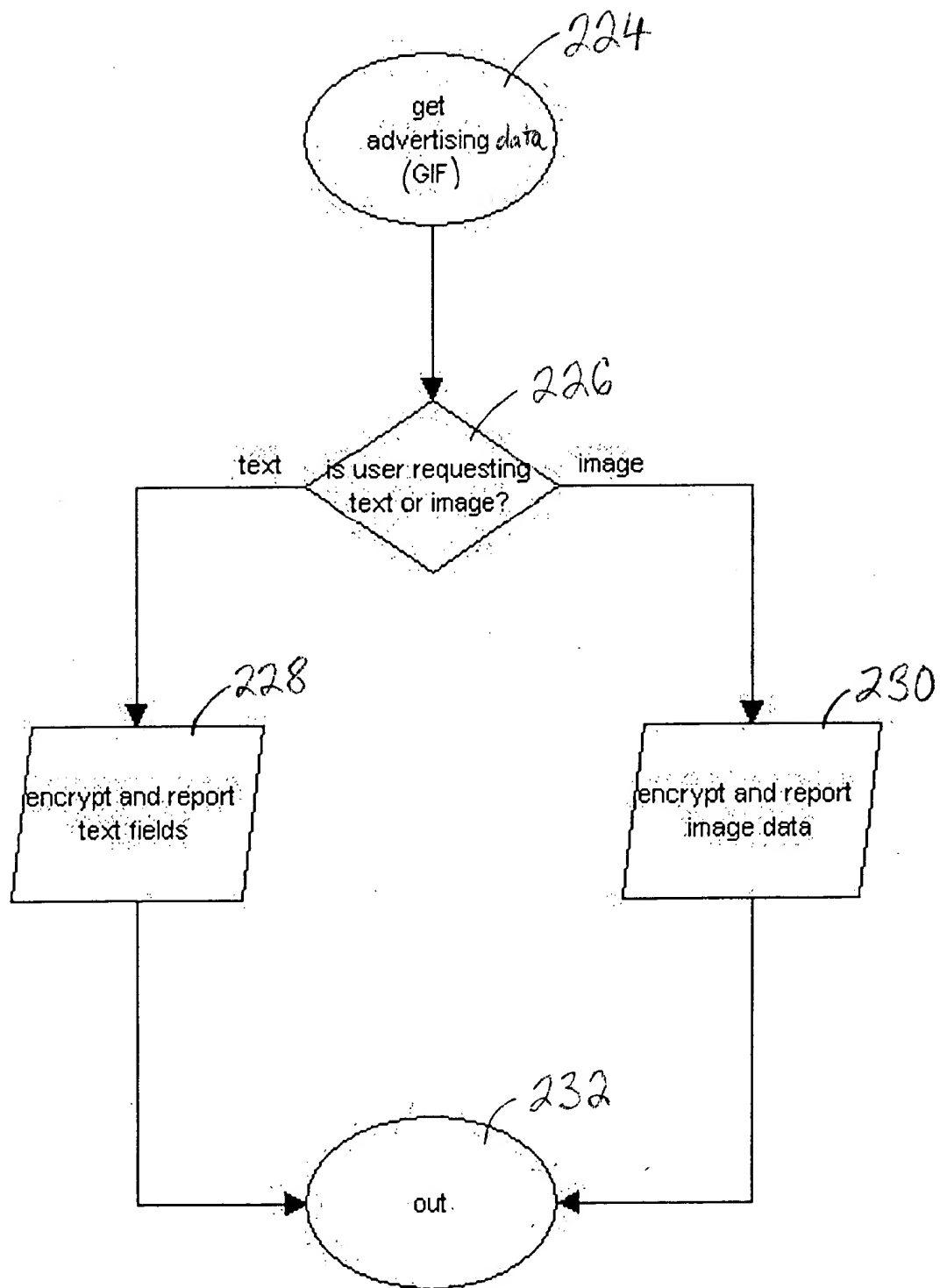


FIG. 12

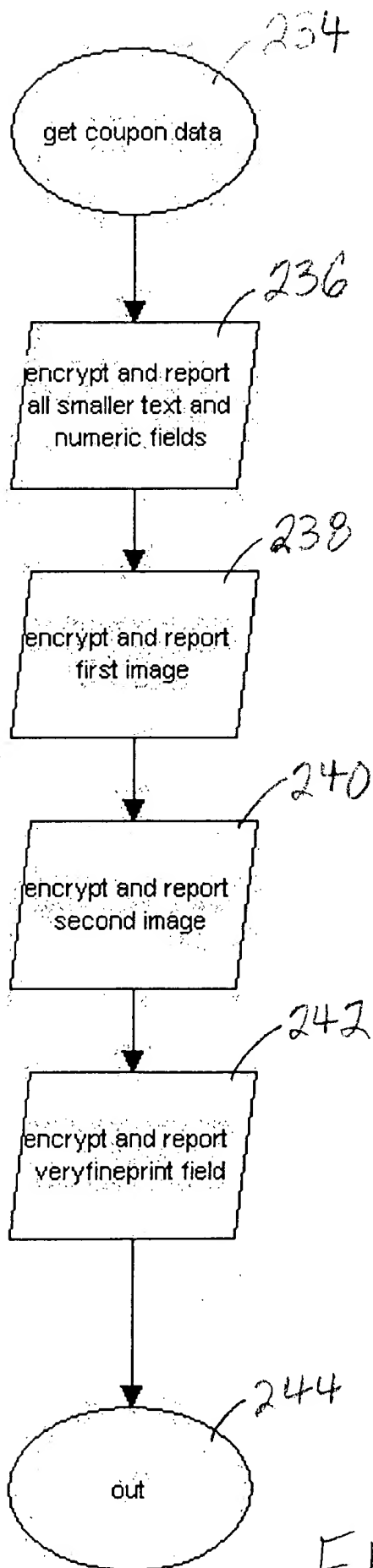


FIG. 13

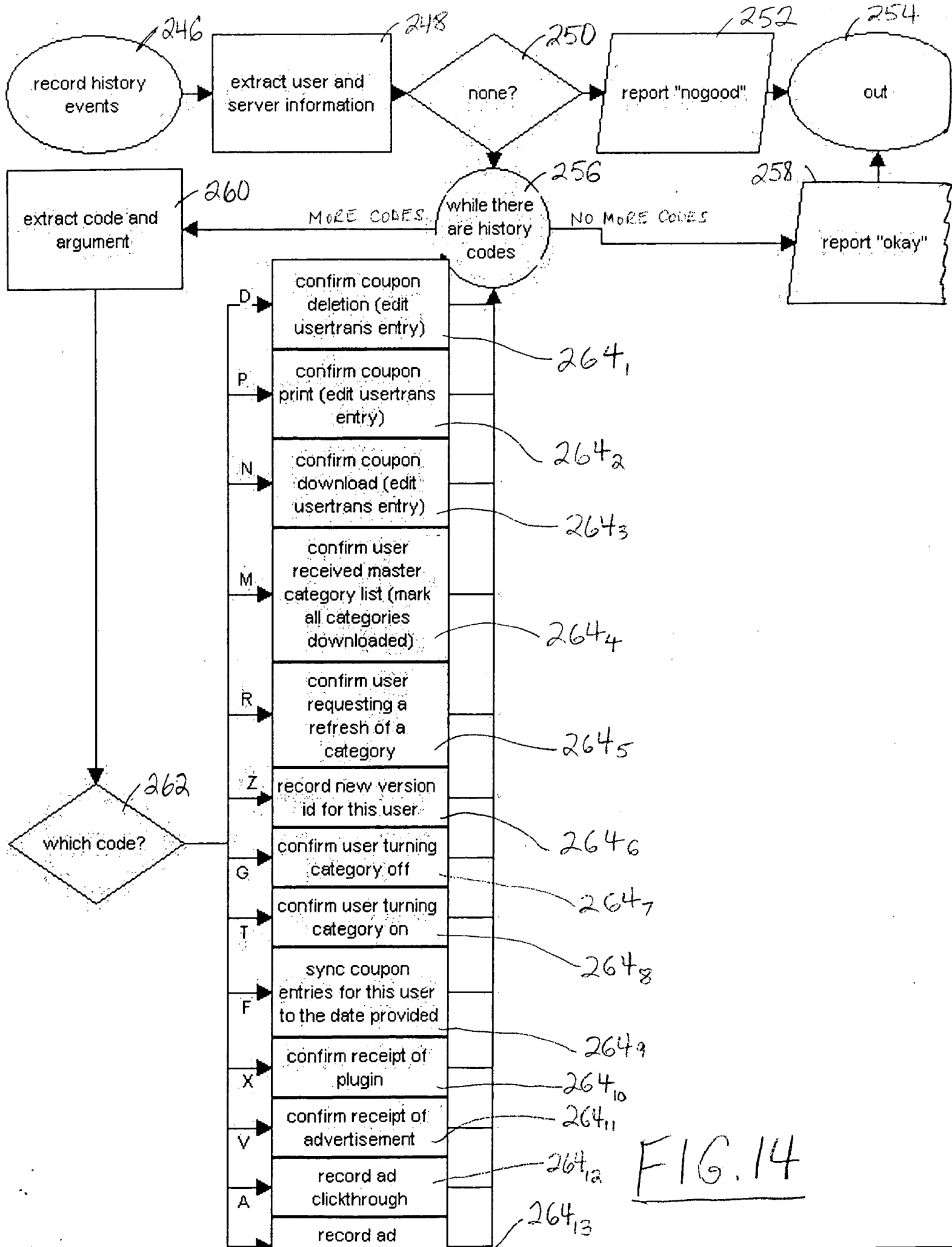


FIG. 14

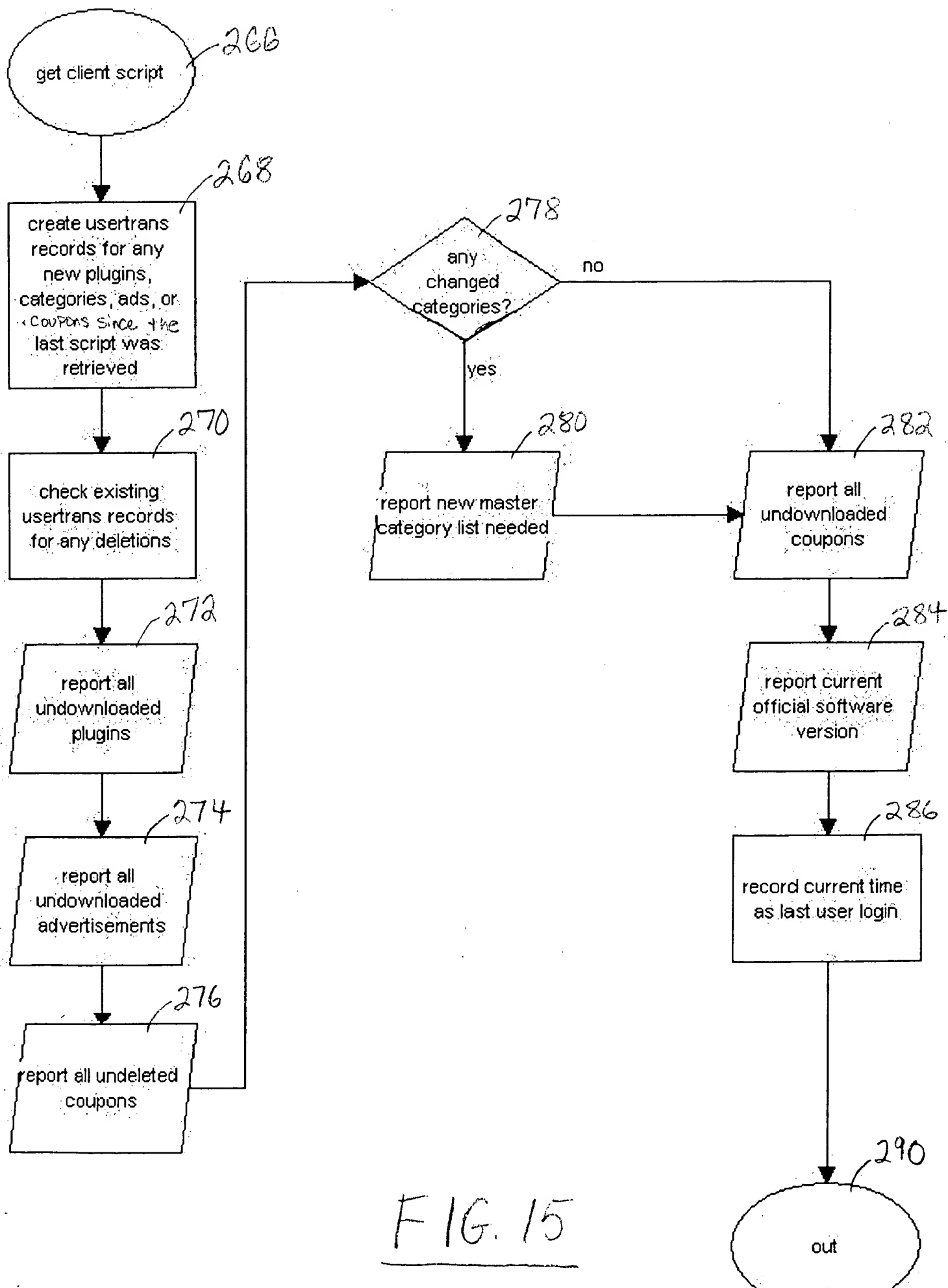


FIG. 15



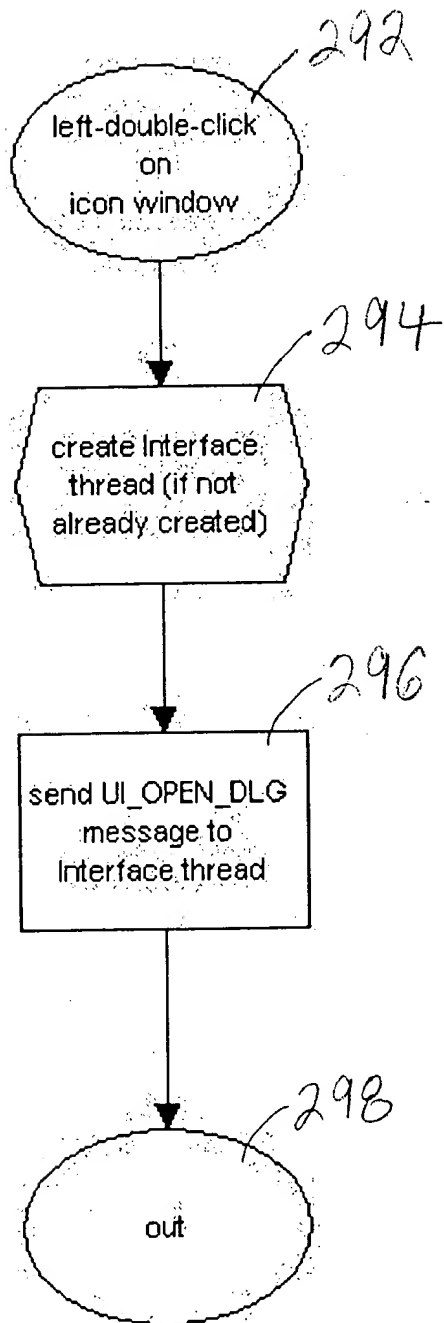


FIG. 16

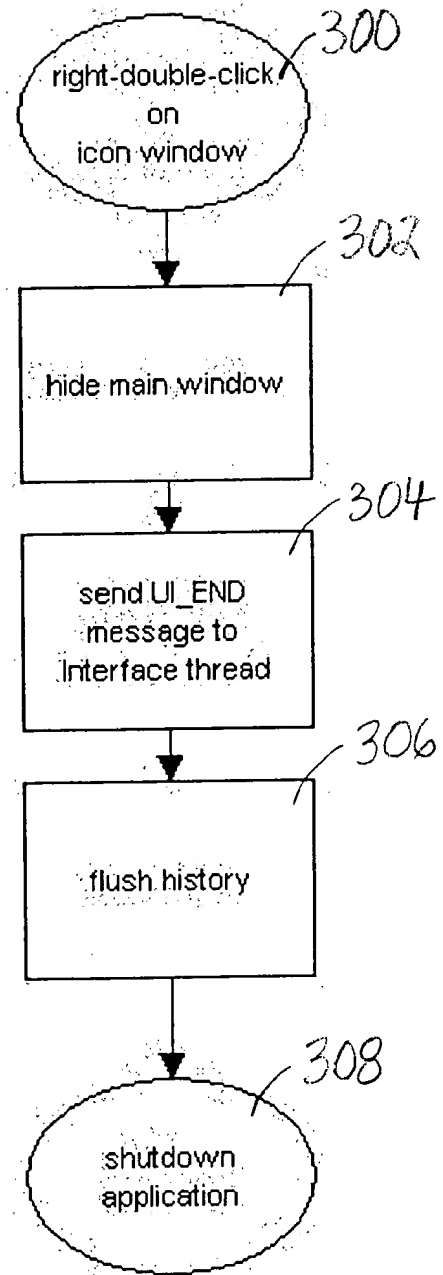
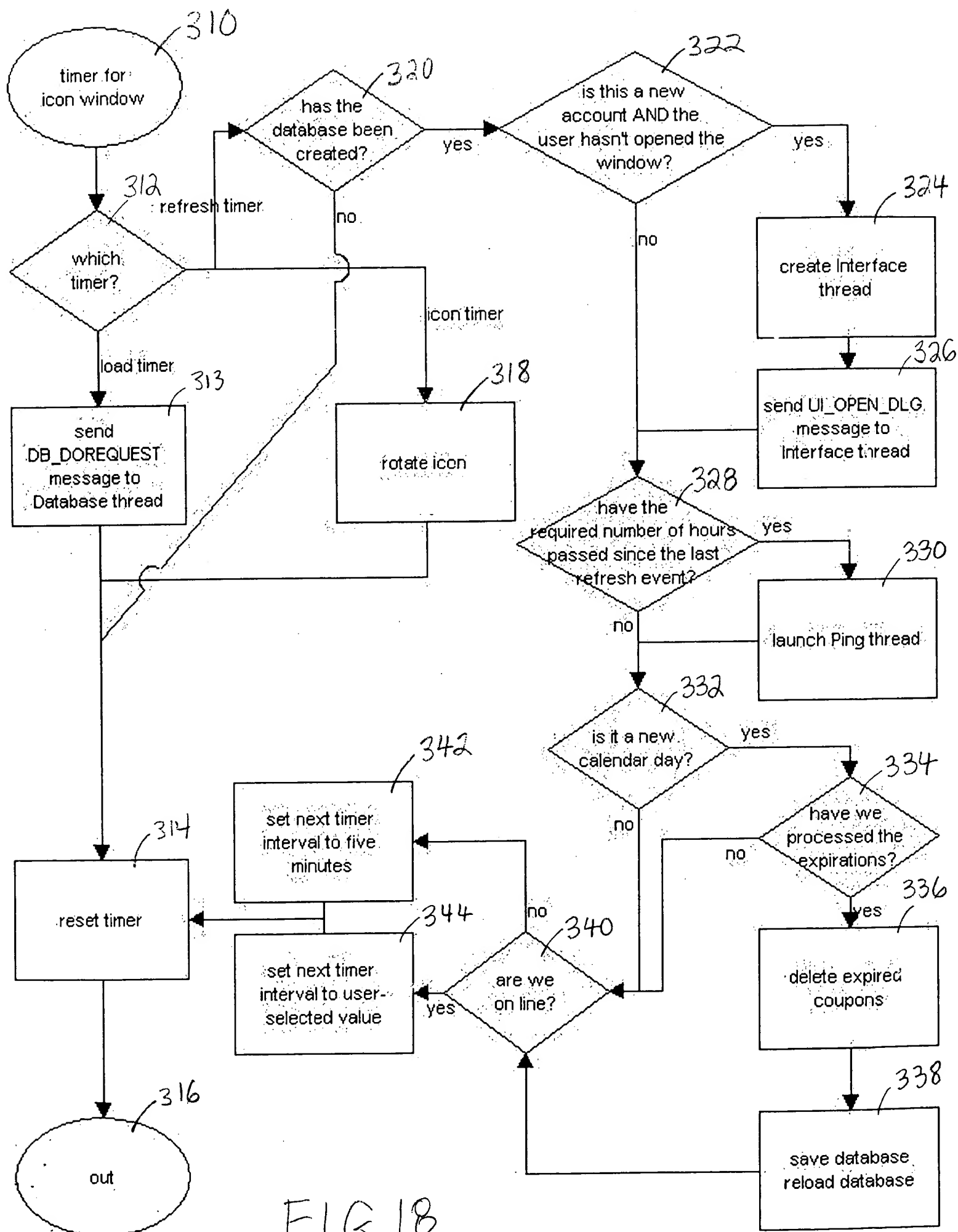


FIG. 17



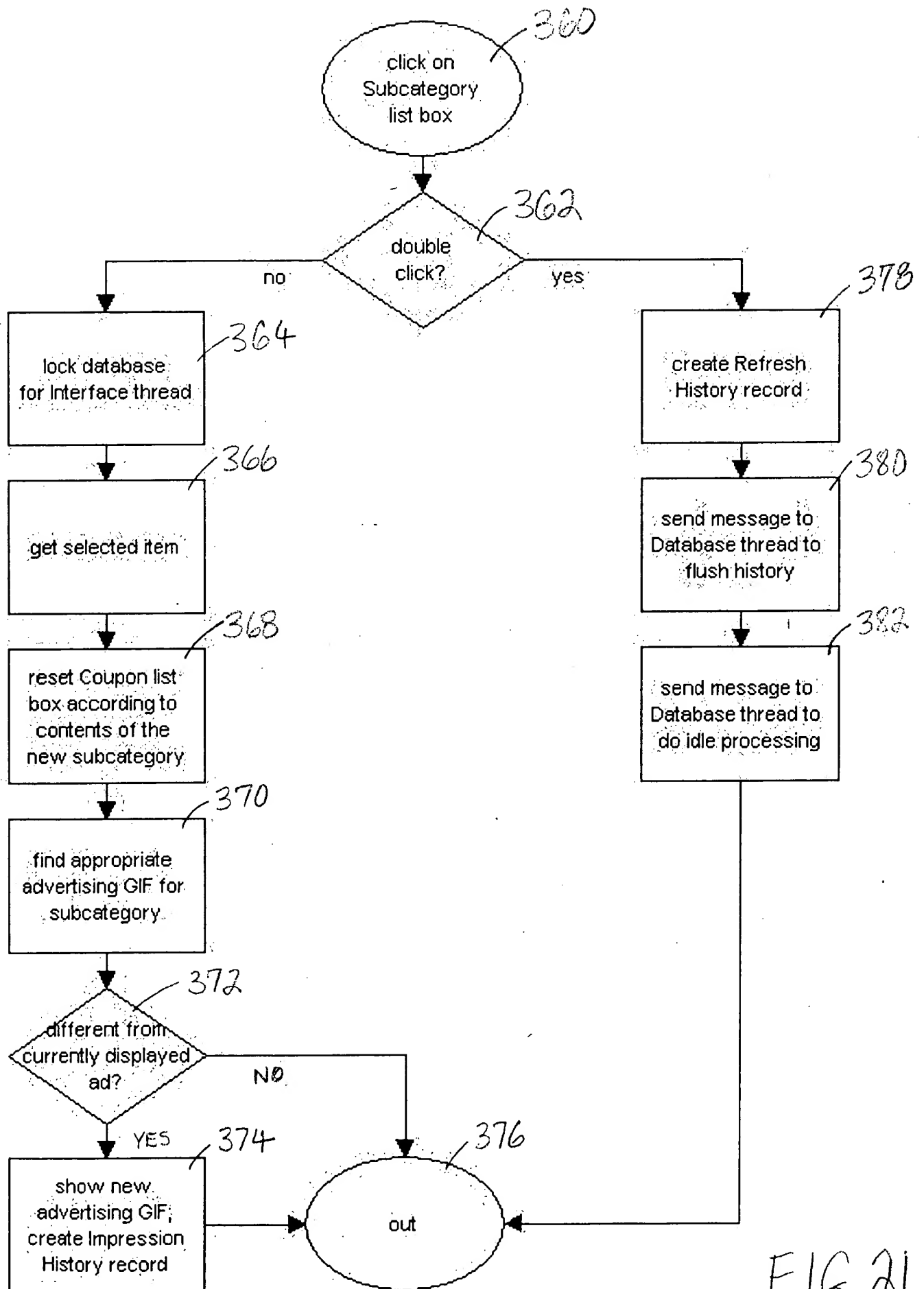


FIG. 21

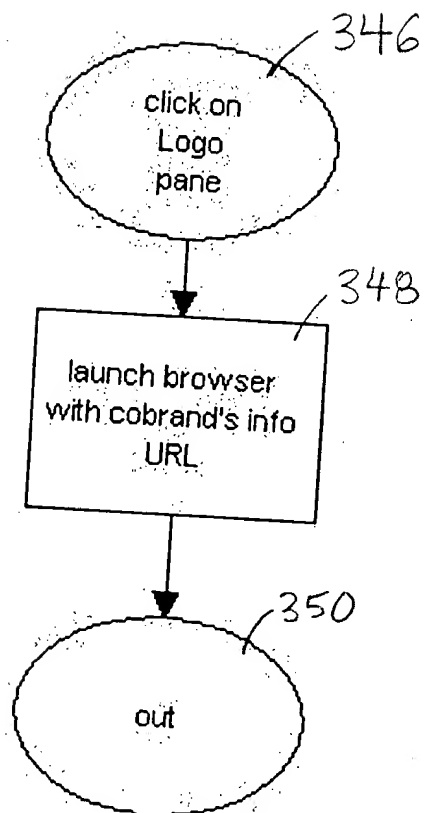


FIG. 19

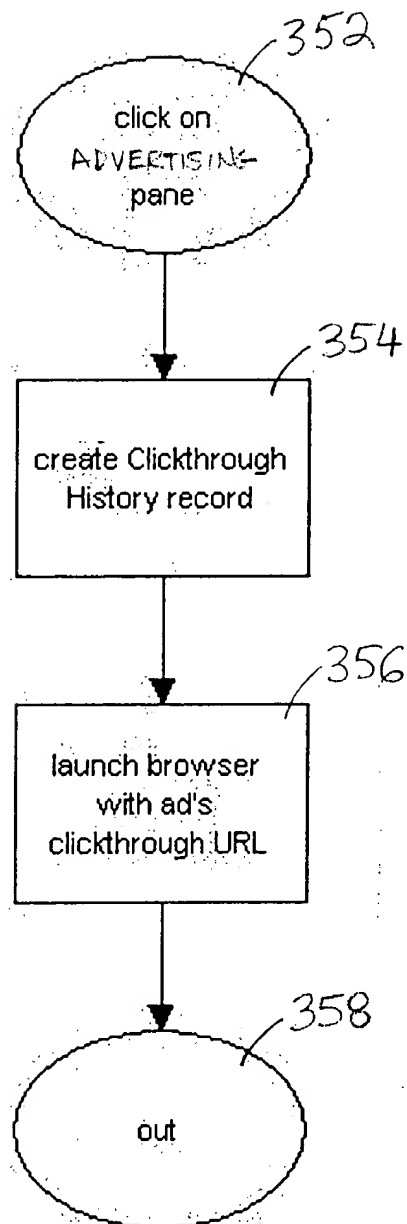


FIG. 20

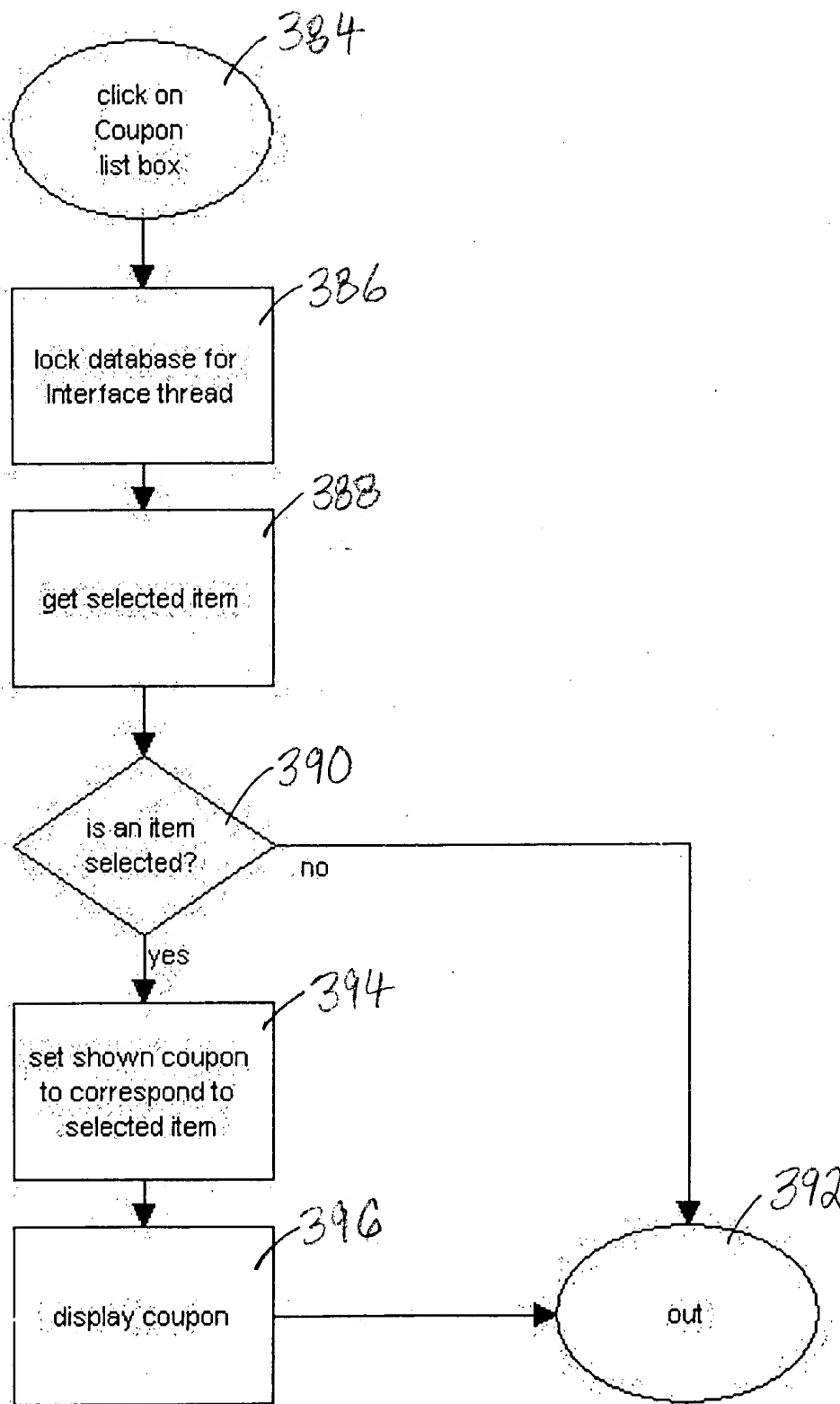


FIG. 22

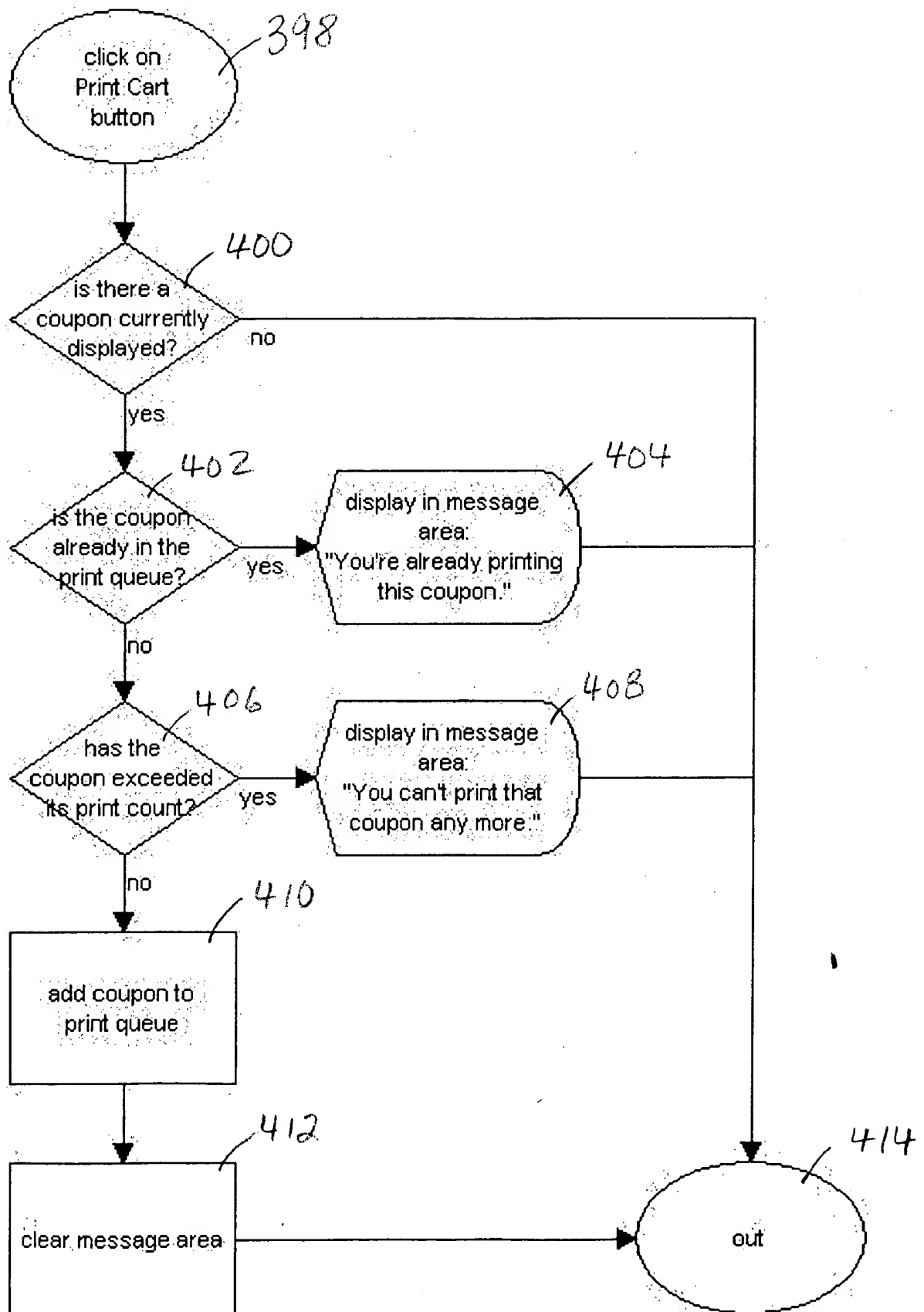


FIG 73